

UNIVERSITY OF PENNSYLVANIA
EGYPTIAN DEPARTMENT OF THE UNIVERSITY MUSEUM

ECKLEY B. COXE JUNIOR EXPEDITION TO NUBIA:

VOL. VII

BUHEN

BY

D. RANDALL-MACIVER

AND

C. LEONARD WOOLLEY

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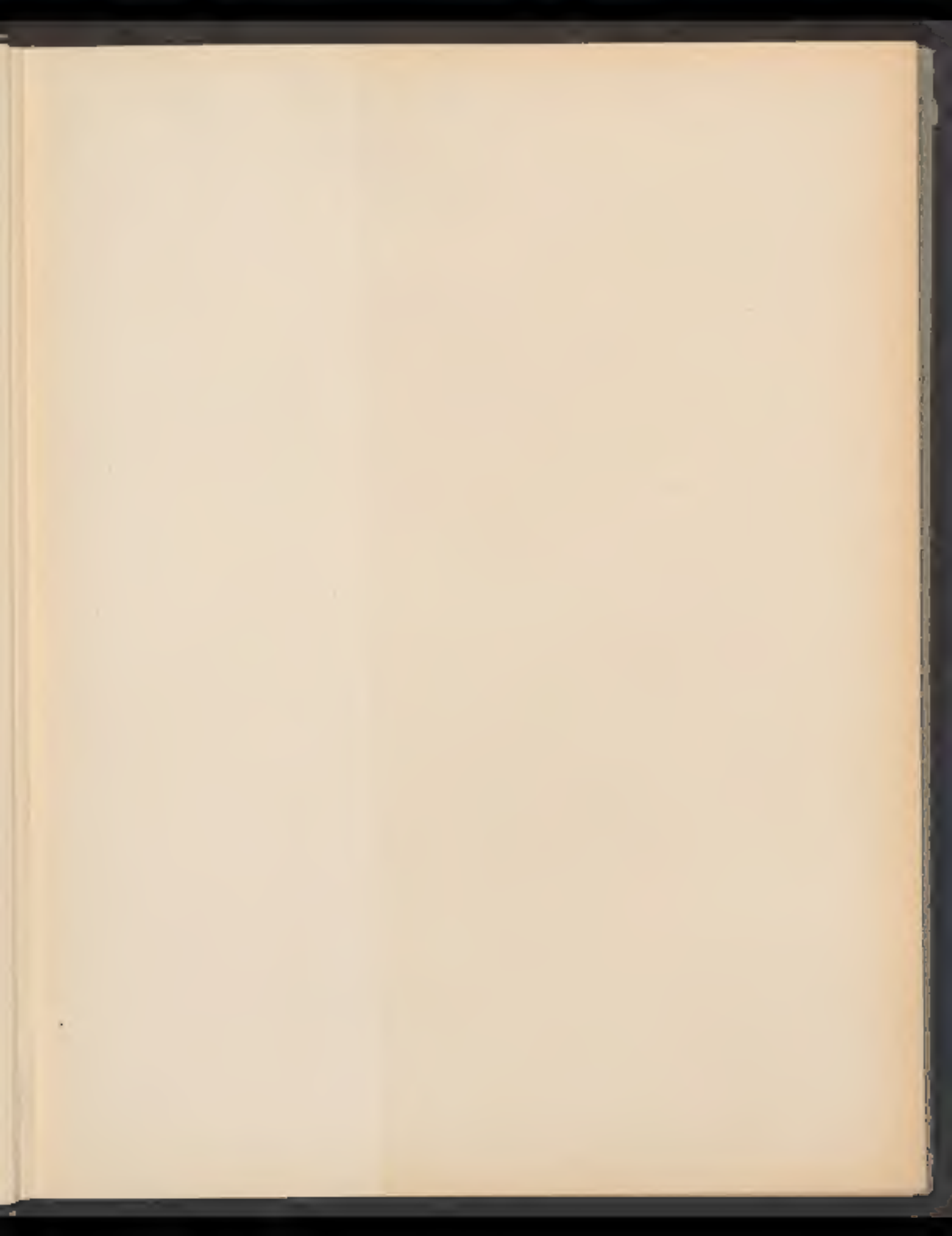
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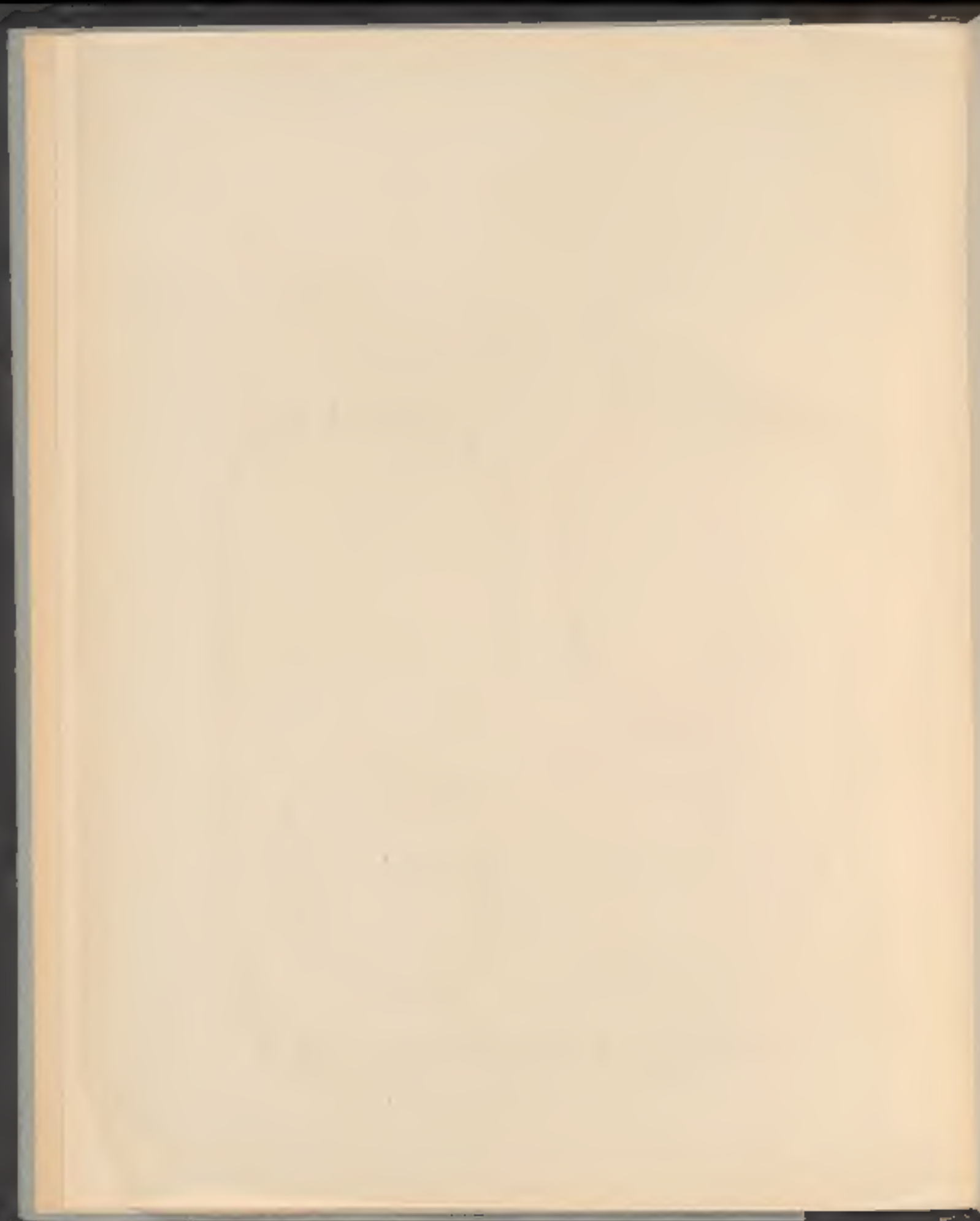








JEWELLERY FROM K. A. A TOMB OF THE TWELFTH DYNASTY.





JEWELLERY FROM K 8, A TOMB OF THE TWELFTH DYNASTY.



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PREFACE

THESE are the two concluding volumes of the British Museum Junior Expedition to Nubia. They deal with the exploration of the ancient Egyptian colony of Buhen, which is situated west of the Second Cataract almost opposite the modern town of Halfa. Two seasons, those of 1898 and 1899, were devoted to this task, and the site, though not absolutely exhausted, was excavated so completely that it is unlikely that further work would yield results of any great interest. The only tracts left unexcavated were the temple of *Imhotep* on the west end, and that of the river town, and the much damaged group of *Amun* temples. Temple and the northern wall of the latter Egyptian town, however, were so damaged, showed that to clear them would involve very great labour and expense, and there was small prospect of obtaining results of any great archaeological importance.

With this exception, the whole of the Buhen site has now been fully and completely investigated. The work was carried out by the Junior Expedition, and is the fruit of the Egyptian Department of the Museum, to which the fullest and most complete report presented in this book. This report, and the plates which accompany it, are from Mr. A. M. Blackman, who is responsible for all the translations of the inscriptions, and for the interpretation of the scenes on the reliefs of Hatshout.

The scheme of the book is a little exceptional. The descriptions that are printed in smaller type are not strictly chronological, but follow the general plan, but which contain two much longer sections, representing the general reader. The cross-references to the descriptions, to the plates, and to the catalogue will enable the archaeologist to examine the inscriptions, reliefs, objects, and dates of every class, while all specimens of any interest whatever are illustrated on the plates.

In the spelling of Egyptian names a compromise has been adopted, which it is hoped may be acceptable to all classes of readers. The Herdner system, slightly modified, has been followed, where direct transliterations are given, but forms such as *Imhotep* and *Imhotep* were so common to English readers have been retained in all cases of importance. The authors, who have sworn allegiance to a chief, are endeavouring their text easily intelligible without sacrificing philological accuracy in passages which appeal to the scholar.

The eight volumes in which the results of the expedition have been incorporated form a complete record of its work, as there remains unreported except the excavation of a small number of New Empire tombs, principally of the Twentieth Dynasty at Amheh. It is intended to include these in the report of any other expedition which may undertake that site.

In concluding our report on the close of the two years term during which we have worked at the University Museum of Pennsylvania, we wish to express our indebtedness to the many persons who have assisted us. Mr. Henry R. Chase, Junior, who has made it possible to carry out our excavations, has not only helped us but has published the results in a most interesting and important manner. The services that he has thus rendered to the history will be appreciated by all those who read the volumes published in this series.

D. R. M.

C. I. W.

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CHAPTER I

INTRODUCTORY

On the east bank of the Nile, within sight of the Second Cataract, stands the little modern town of Halfa. It is about ten miles north of the Firket Rock of Abusir and twenty miles south of Fiume, the official frontier between Egypt and the Sudan. The existence of Halfa is due to the value of its strategic position, for in the time of the Mahdists, before the frontier of Egypt was placed there, and between the years 1884 and 1896 the place was constantly besieged by British or Egyptian troops. Fighting around Halfa itself was common, and Lord Kitchener's expedition began its victorious advance, and the town was even fortified with a strong brick wall, which is still standing and lends a pleasing mediæval touch to its appearance. The warehouses of the troops, now long disused, are crumbling ruins, but the young trees planted by Sir Evelyn Wood have grown into shady groves which afford grateful shelter from the scorching heat of the tropical sun.

Adjoining Halfa on the north and connected with it by straggling buildings, is the native village of Tewfikieh, which has grown into a town of some importance, with many Greek stores and a considerable population. The river front is formed by a stone embankment upon which is built an attractive line of buildings, chief amongst which are the post office and the hospital. Behind these are several rows of native streets, from which is seen, in the distance, the white minaret of a little mosque. At the south end of Tewfikieh is the railway station, the terminus of the desert line to Khartûm.

This is the railway which was begun by the Sudan in 1897 and pushed forward with such astonishing speed to assist the advance of the expedition on Abu Hamud. Had any other starting point for it been chosen, Halfa would have sunk, like Korosko, to the condition of a deserted camp, surrounded by a few peasants' houses. But as the Government have established workshops, both for the operatives of the Khartûm railway and for the steamboats which make the connection with Aswân, the settlement near the old camp has become a busy centre of employment. The English colony consists of only half a dozen persons, but they are the heads of

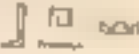

The Sudan
Embassy
and
Sudanese

important branches of the administrative service, comprising the Governor of the province and his staff, the Assistant Director of the Government steamers and the Assistant Director of the railways. Their residences stand amid trees and gardens close to the river.

*Barrenness of the
N. A. Nile
Bank*

The narrow belt of fields and trees which skirts the eastern bank at Hadfa seems luxuriant in contrast with the barrenness of the western shore. A strip of hippos, only a few yards wide, lines the water-edge below the top of the bank and opposite the sakhaya, a group of sycamores shelter a deserted village, otherwise there is not one green plant to be seen. It is undrained waste, grim and savage. An object that looks like a tower of brick is clearly visible from Hadfa, three miles away. It is the round pylons of a temple, the southern temple of Buhen.

*Old temple
found
in 1892
at Buhen*

The earliest mention of Buhen was on a stela of the reign of Sesotris Ist, discovered in the northern of the two temples. One of these has been known since 1829 when it was brought to light by Champollion, the others were found in 1892 by Capt. H. G. Lyons. Next the same occurs in a list of the Egyptian frontier fortresses contained in an unpublished papyrus from the Ramesseum in the possession of Mr. Alex. H. Gardner, the date of which is shortly after the Twelfth Dynasty. In the New Empire the local god Horus of Buhen was widely recognized, then we read on the Kestner stela (translated in Beasted, *Ancient Records*, III, p. 115), "Gold comes forth from the mountain at his name like that of Imhotep, Horus Lord of Bek, great as he is in the southern countries, like Horus in the Land of Menn, Lord of Buhen." It is generally written  but the Ramesseum papyrus and a stela found by Capt. H. G. Lyons preserve the fuller form of  which may be rendered by the word that we have taken for the title of this book. The town of Buhen was one of those military colonies which the Egyptian kings of the Twelfth Dynasty planted near their southern frontiers to protect the kingdom from invasion by the Blacks, so that its origin is curiously analogous to that of Hadfa itself in modern times.

*H. G. Lyons
Excavations
at Buhen*

The two temples have long been known. Champollion and Rosellini visited them and the former has left a description of them in his journal. Col. Sir C. H. Collett-Smyth cleared the southern temple in 1887 and Capt. H. G. Lyons excavated the northern in 1892. In 1905 Sir Reginald Wingate, Governor-General of the Sudan, determined to protect the southern temple from the desert storms by

building a high wall round it and placing a light grid over the finer reliefs of the central part, a work which was carried out by the late Mr. P. D. Scott-Moncrieff of the British Museum. When we made a preliminary visit of investigation in January, 1908, the southern temple was in admirable condition, but the northern had once again been almost obliterated by the drifting sand. As the previous excavations had confined themselves to the two temples it was evident that much remained to be studied. No considerable mounds were apparent at any point, but in many places lines of brickwork were visible beneath the sand and some of these could at once be recognized as part of the ancient fortifications. It was clear that they enclosed a town of considerable extent and we determined to obtain permission for a complete exploration of the site.

Work of
P. D. Scott-
Moncrieff
at Thebes

In January, 1909, we returned, prepared for a thorough campaign of excavation. The director of the expedition arrived ten days before, in order to begin the building of a house, as tents are impossible in a climate like that of the Sūdān. Store-rooms, a developing room for photographic work, and places in which costly and delicate apparatus can be protected from the sun and the driving sand, are indispensable in the interests both of economy and efficiency. Moreover, the health and working power of the members of an expedition can only be maintained under the stress of a desert life if conditions of reasonable comfort are provided. This word of caution may be useful to the newcomer, whose enthusiasm might lead him to forget the practical considerations which must be respected if an expedition is not to culminate in more or less disastrous failure.

Commence-
ment of our
Expedition

We wasted no time, however, in making our permanent quarters; the large house shown in Pl. I was entirely completed within and without in four weeks and a half. Exploration was begun ten days after the foundations were laid, and proceeded so rapidly that the store-room could scarcely be completed in time to accommodate the numerous antiquities that were being brought in from the tombs. Within three weeks of our arrival a great part of the northern cemetery had been worked, and preliminary surface digging had revealed the whole system of fortifications encircling the ancient town. In 1909 we remained until April, during which time we discovered and excavated two considerable cemeteries of the New Empire and the greater part of a cemetery of the Twelfth Dynasty, as well as the outlines of the exterior fortifications and a small portion of the inner wall of the town. In 1910 while Mr. C. L. Woolley was employed in exploring the Romann-Nubian town and castle of Karanög near Anibeh, Dr. Randall-MacIver spent from the first week of January to the middle of May in clearing the whole area between and around the two temples. Lastly, in November, 1910, Mr. A. M. Blackman completed our studies of the site by opening on our behalf

Summary
of the
Progress
made in
Four
Seasons

the two last Twelfth Dynasty tombs. Since there had not been time to work in the spring, and making various supplementary notes.

*For further
of the house
building, see
Exposition*

We may now describe the principal parts of the city and the surrounding country. A prominent object in the landscape is our house, which stands 300 metres from the river bank * west of the temple and the ancient town. It is built of mud-brick, whitewashed outside. For the sake of light the domed living-rooms are whitewashed inside as well, but the others are only plastered with smooth mud mortar, which absorbs the light and rests the eyes after the glare of the desert. No wood is used in the construction, principally for want of white ants. The walls are very thick, as they must be to support the heavy domes and vaults. The vaulting has been done on the principle which the Nubians themselves employ throughout a great part of the country and forms an interesting study to native builders. The system, which is indigenous to the country, was evolved at an early date and freely used in the Roman Nubia, as well as in the Coptic period. Readers who are interested in the subject may be referred to a previous volume in this series, *"Khartoum"* (Lekley B. Co's. Inner Exposition, Vol. III, p. 18 and Vol. IV, Pl. III).

The design of the house is our own and proved to be very well adapted to the conditions of the climate. Thick walls and small openings are the only rational system for a desert house. All openings, doors and windows, must be made on the side which is not exposed to the prevailing wind, therefore on the west side we made only a single door, which was needed to connect the living-rooms with the kitchen, a detached building several yards behind the house. The windows are made as small as possible, except to give the all-unnecessary light, but are not placed

The *corps de logis* is formed by three domed rooms, of which the central is the largest, which occupy the west end of the house. The two wings are composed of a series of three small rooms, which are roofed with barrel vaults and separated from one another by narrow little courts open to the sky. A screen wall connects the different parts and encloses the whole.

*General
description
of the site*

The photograph on Pl. I will convey an idea of the general appearance of the site. The house stands on a pleasant midway between the mountains of the western desert and the river. Behind it rises an isolated conical hill, like the mountains of the Purgatory, and behind this again runs a long ridge, which, at its northern end, breaks off into the isolated kopies shown in the background of Pl. II.

* In all descriptions in this book we use the system of compass which reckons the cardinal points as if the north ran due north and south. Accordingly this is a very rough approximation; the exact orientation can be seen from our general plan, Pl. VI.

Immediately north of the house the plateau is occupied by a New Empire cemetery which will be referred to as cemetery H. South of the house are some shallow trench graves of the New Empire and scattered shaft-tombs of the same date, which form the outlying part of cemetery J. The main part of cemetery J is situated on the conical hill itself, which is honeycombed with galleries, and on the low ridge between it and the house. A few hundred yards south of the hill some circular mounds mark the graves of gods and some important instruments of the Romano-Nubian and Christian periods.

The eastern edge of the plateau is defined by a low cliff about two metres high, which can be seen in the photographs on Pl. 31. The side of this cliff had been utilized for graves of which a few at the southern end belonged to the Eighteenth Dynasty but the majority were of the Middle Empire. The rubbish heaps behind the trenches in Pl. 31a mark the approaches of a group of Twelfth Dynasty tombs, which are the most northern examples of that date on the site. The same cliff line continues for 300 metres south of the temple shown in this picture, and is pierced with numerous Twelfth Dynasty tombs, which were some of the most interesting and valuable that we discovered. They compose the greater part of the cemetery lettered K, of which the most curious feature is that it lies almost wholly within the circuit of the walls enclosing the ancient town. For the town, in the centre of which stand the two temples, extended for a length of some 500 metres and a breadth of 700 metres over the low-lying ground between the plateau and the river. Round the whole of this area ran a remarkable series of fortifications, enclosing consequently a circuit of about a mile, which came up on to the plateau and ran along the eastern edge of its cliff. On this side the fortifications consisted of two elements, namely, a massive brick wall several metres thick, strengthened by numerous buttresses on its outer face, and a ditch with sloping sides cut in the rock of the plateau. The ditch was two metres deep and six metres wide, and its effectiveness was increased by two low and narrow walls, built on either edge of it. At the north and south ends of the town, where the ground was sand and not rock, it had been impossible to make a ditch, but the two low walls were nevertheless continued in front of the great wall with an empty level space between them. The line of fortifications was brought out at several points into large salients in which, on the north and south sides at least, could be traced the foundations of towers built outside the principal wall. In the two corners on the river bank there were apparently gateways. But on the river-front itself this construction had perished to such an extent that the lines could no longer be traced with any certainty.

*Ancient
Town with
Fortifications*

*Earlier
Fortifica-
tions of the
Middle
Empire.*

The brick pylon, which was mentioned in an earlier paragraph, is part of a wall which belongs to a different series of fortifications from those which have just been described. There is good reason also to suppose that it belongs to a different date. But whereas we should have little hesitation in dating the outer walls and ditch to the Eighteenth Dynasty, we regard it as virtually certain that this inner wall, which bounds the southern temple on the east and north and separates the town dwellings from the temples on the west side, was built in the Middle Empire. It forms part of a whole series of buildings of which the foundations have been discovered beneath the New Empire temples. The course of the inner wall, which probably enclosed the greater part of the Twelfth Dynasty town has been traced westward to a point 90 metres beyond the western wall of the temple. It there turns and runs south for 150 metres, after which it returns again eastwards, though only a small portion of this side is preserved. The construction is strengthened throughout by numerous exterior buttresses which are a noticeable and characteristic feature.

*The Two
Temples.*

The position of the temples may be seen from Plan B. Both are built over earlier Middle Empire structures, but in their present form date from the Eighteenth Dynasty. The southern temple was erected by Hatshepsut and considerably altered by Thutmose III, the northern was founded by Aahmes Ist, and rebuilt by Amenhotep 2nd.

*Mosaic
inscriptions
on the
Southern
Temple.*

From the absence of any inscriptions and still more from the absence of any graves later than the Twentieth Dynasty it may be inferred that the colony of Buhen was abandoned as an Egyptian post at the close of the Ramessid period. The southern temple, however, must have remained more undisturbed by rubbish, for on the right hand exterior door sand has a few letters not far above the ground engraved in the Merotic hieroglyphs and some of the columns of the forecourt have at about the level of a man's height from the ground several inscriptions painted in the same script. Moreover on the southeast corner of the forecourt only a few inches above the Eighteenth Dynasty floor level were the remains of a hearth and ash-tray which were present in the Roman-Nubian period. At the same date the original Eighteenth Dynasty roof built round the temple were cleared over afresh and reconstructed. After the pagan period the temple perhaps converted part of Hatshepsut's temple into a church, of which slight traces can be seen, and built dwellings round it.

*Remains
Nubian
and Roman
Villages.*

The principal settlements of the Roman-Nubian and the Coptic periods are, however, not on the ancient Egyptian site, but at a little distance to the south. About a hundred metres from the south side of the Eighteenth Dynasty

fortifications on a little spur of the plateau are the ruins of numerous brick buildings. These represent a Coptic monastery built around a church of very early date, which has been fully described in another volume of this series: ("Churches in Lower Nubia," Eckley B. Cose Junior Expedition, Vol. II, pp. 49-56).

Three hundred metres south of the Eighteenth Dynasty town on the low ground between the plateau and the river is a small unwallled village of Romano-Nubian date. We made some trial excavations which showed that the houses, one of which is illustrated in Pl. 68, were not sufficiently interesting to repay detailed work. They evidently belonged to a very poor community, and the only building of interest was a miniature temple, also illustrated on Pl. 68. The Romano-Nubians made most of their interments on the plateau just behind their village, but in several cases utilized the large New Empire tombs of the H and K cemeteries. They built also a remarkable little shrine on the edge of an isolated spur, west of the J cemetery, and about half a mile from their own town.

Romano-
Nubian
Village.

Between Buhen and the rock of Abusir are several sites of interest. The most important of these is three miles to the south of our house. To judge from surface indications it is of New Empire date, a building in which the bases of columns are visible may well be a large princely residence, and is surrounded by very extensive brick ruins that can be detected beneath the sand. Just beyond it is a large enclosure surrounded by a wall of stone and brick with remarkable horseshoe buttresses or bastions.

New
Empire
Building
between
Buhen and
Abusir.

Nearly opposite to this on the island of Mednarti or Merenarti are the remains of a large Coptic monastery. During the Dervish troubles a fort was erected on the island and the mediæval buildings were necessarily damaged in consequence. The church may possibly lie beneath the modern fort, we were unable to identify it with any other part of the site. Mr. G. S. Milcham ("Churches in Lower Nubia," p. 5), suggests that this may be the monastery of S.S. Michael and Kosmas mentioned by the Arab historian, Abu Selah, as situated near the Second Cataract.

Coptic
Monastery
on an
Island.

Another small island near this is surrounded by a well-preserved and massive brick wall, which, no doubt, represents the remains of a small fort built by the Egyptians of the Eighteenth Dynasty to guard the outlet from the cataract. A little further to the south (on the mainland), are two or three Coptic chapels.

Eighteenth
Dynasty
Fort on an
Island.

We have not as yet explored the east bank of the Nile near Halfa, but there is reason to suppose that it was not wholly uninhabited. Close to the railway

Residence : station, the numerous remains of pottery of the Eighteenth Dynasty strongly
Antiquities suggest the existence of a cemetery of that date, and some stone steps on the
Archaeology river front, near the south end of the "Harem" are very noticeable and no
Excavations doubt belong, as Capt. H. G. Lyons has pointed out, to some ancient building.
 In the garden of the Sirdar's are several Coptic capitals which must have
 been brought from some church in the neighborhood.

CHAPTER II

THE HISTORY OF THE SOUTHERN TEMPLE

The southern temple at Edfu is built of fine sandstone from some Nubian quarry and consists of two principal parts. These are (1) a closed and roofed oblong building, in the centre of which is the sanctuary, flanked by an open colonnade on two sides, and (2) a forecourt open to the sky composed of a curiously unsymmetrical combination of square pillars and round columns. The whole is encircled by a massive brick wall on the east face of which is the entrance door.*

*Important
parts of
the Temple.*

The first point that will strike the observer is that the entrance door does not coincide with the central axis; it is ~~some~~ ^{about} ~~thirty~~ ^{thirteen} metres south of a line bisecting the forecourt. The door of the temple, however, is exactly on the true line and is directly opposite to the quay steps outside. So that it is evident that the original design of the architect must have been altered and interfered with by the person who built the forecourt.

*Unsymmetrical
plan of the
Temple.*

An examination of the scenes and inscriptions furnishes a clue to the history of the construction. On the lintels of the entrance door is the figure of a king, whose name Menkheperre is plainly visible. If we pass into the forecourt we shall find that though the columns and pillars contain numerous ex votos and secondary inscriptions of later reigns, yet all the sculptured scenes in which a king is shown in ceremonial before a god or goddess purport to represent the same monarch, Thothmes 3rd, and no earlier name occurs. On the south side of the court, moreover, in a position of great prominence (No. 11), is a large triumphal stela recording the victories of this king over the Libyans and Syrians. There can be no doubt, therefore, that the forecourt as we now see it is the work of Thothmes 3rd.

*Figures
found by
Thothmes
3rd.*

But the main building which contains the sanctuary reveals a wholly different origin. It is true that the name of Thothmes 3rd occurs in several places and

*This temple was visited by Champollion in 1829, and is briefly referred to in his account of the ancient remains at Wady Halfa—('Notices Descriptives,' Vol. I, pp. 29-30). To judge from the slight sketch plan which he gives, the forecourt was the only part distinctly visible in his day.

At the
Building
Earlier than
Thothmes
Ist

that it is the only one mentioned in the most important scene of the sanctuary itself (No. 80). But it does not always stand alone, on the door of the sanctuary (Nos. 48, 49) and on that of the northern corridor (Nos. 51, 52) it is one of a pair, the other being Thothmes 2^d. And in the doorway and corridor behind the sanctuary (Nos. 89-90) the only royal name visible is that of Thothmes 2^d. Moreover, in two places the name of Thothmes 1st can be plainly read, viz: at the northwest exterior corner of the northern wall (No. 105) and on the doorway of the sanctuary (No. 49), while a part of his Horus name ('Morpneut') can be detected on the exterior southern wall (No. 128). The natural inference is that the main building was erected not by Thothmes 3^d but by an earlier member of his house.

If we next proceed to study the ceremonial scenes of the main building, it will appear that they have been mutilated and altered in various places. On the exterior faces of the northern and southern walls (Nos. 98, 105 and 106, 114) the founders sculptured a series of reliefs describing the erection and endowment of the temple. Entire figures have been sawn out of these scenes at regular intervals apart, and that this was done by ancient Egyptians at a virtually contemporary date, is proved by the insertion in one place (No. 104) of a fresh block, carved as to replace the original. Again in the corridor behind the sanctuary, where two royal persons appear alternately to perform a series of duties, it can immediately be seen that every alternate royal figure has been reserved, the place has been sunk by grinding away the original relief and a fresh figure in exceptionally inferior style has been placed over it. Having learned that it was Thothmes 3^d who completed and altered the temple, we can readily surmise what has happened here. The sovereign whose portrait has been erased is Hatchepsut, the famous queen, whose memory Thothmes 3^d persecuted with such unremitting malignity.

Hatchepsut
the Great
Founder

This theory, in itself intrinsically probable, is conclusively proved by the evidence of certain words, which were grossly altered by the workmen entrusted with that task. Thus on the doorway of the corridor north of the sanctuary may be seen the cartouches of Thothmes 3^d (No. 51) itself superimposed over an erased cartouche of Thothmes 2^d (No. 51). But the epithets "beloved of Horus" and "given life, love, power", which follow the name of Thothmes 2^d, have become demonyms, which betray the secret that the titles were originally those not of a king but of a queen. The same grammatical peculiarity occurs again after the cartouche in No. 71, and in several other places.

*The numbers are those used in the plan, Plan A.

feminine terminations can be detected more or less clearly, as will be shown in detail in the next chapter. There can therefore be no doubt that the cartouches in the main building were originally those of Thothmes 2nd and Hatshepsut, but were deliberately altered to Thothmes 2nd and Thothmes 3rd, and that the royalty whose figure has been consistently cut out or erased was Queen Hatshepsut, the principal builder of the temple.

It will now be interesting to enquire how far the temple had been completed in Hatshepsut's reign, and how much was changed or rebuilt under Thothmes 3rd. The latter certainly made no structural alterations in the main building, but it is clear that he changed the whole appearance of the forecourt. Such unsightly unions of square pillars and round columns as Nos. 23-24, 29-30, and 13-14 are altogether without analogy and can never have been designed by the admirable architect who executed the work of Hatshepsut. Still less can he have intended to block the axis of approach to the main building by placing a pillar or column in front of it where Nos. 13-14 now stand, a piece of bungling which made it necessary to displace the entrance door.

The original design, suggested by Thothmes 3rd

We may reasonably conjecture that the original design was that of a four-sided open court surrounded by symmetrical lines of free-standing columns, behind and outside which were square pillars against the brick wall. Very possibly it was the necessity for finding a suitable place for the great triumphal stele on pillar No. 11 which brought about the present confusion.

If the pillar No. 11 were replaced by a column, and the corresponding pillar No. 16 by another column, and Nos. 14, 15 were moved a little northward to come opposite 27 and 28, we should obtain a perfectly symmetrical and normal scheme with a western colonnade of six columns, northern and southern colonnades of three, and an eastern of six, from which only one (that opposite to 26) would have disappeared. The square pillars Nos. 23, 24, 29 would on this view form no part of Hatshepsut's plan. The little chapel east of 25 and 26 may, however, well be original.

Behind and around the columned forecourt would have been a line of square pillars resting against the brick wall and forming an outer enclosure. But it is impossible that the eastern row can have stood as we now see it, for the pillars 5 and 6 block the main axis and yet all the rest in the row are spaced at equidistant intervals so that they make a consistent scheme. The row of pillars Nos. 1-9 must therefore be regarded as an interpolation due to Thothmes 3rd. Again we have already suggested that Nos. 23, 24, 29, 13, 14 are obvious interpolations since they mar the original symmetry of the columned court. Now

The
original
design
of the
temple
is
shown
in
Fig. 1.

the total number of base intercalated tablets is twelve, counting Nos. 1, 5, which are merely descriptive. It would seem a reasonable hypothesis that they were originally intended to continue the outer enclosure on the south and north of the main building. For if six were placed on each side so as to continue westward the line of Nos. 11, 12 and the line of 17, 21, 22, they could be spaced at the same intervals as those columns between the first and would then almost exactly fill the vacant space along the back wall on the north and south sides of the main building (see Fig. 1 for restoration).

If the four pillars (Nos. 1, 6) are removed from the eastern brick wall the front is incomplete and it is probable that it never was actually completed in the original design. The building of the eastern brick wall must certainly be regarded as the work of Theban king Amenemhat, for as we have shown, it was he who made the entrance door, and yet there is no evidence of rebuilding of the brickwork, such as must have appeared if he had closed up an older doorway and cut his own in another place. It must be inferred that Hatshepsut's architect, perhaps Senmut himself, did not carry the building out to the base court, he had not time to complete it and made no entrance or approach. The quay with its stone steps he found already existing as a structure from an earlier Twelfth Dynasty temple, and in making his own plan, though he had the axis askew to the earlier building yet he placed the secondary door opposite to the ancient quay. Beginning with the oblong building containing the sanctuary he completed it and saw it sculptured and decorated inside. Next he planned in position the columns of the side colonnade and of the forecourt, and proceeded to dress them into "proto-Doric" polygons like those at Deir el Bahari. Work of this kind was generally done after the rough hewn stones had been already placed in their proper positions and it is no doubt significant that whereas most of the columns are finely fluted, yet one or two, especially on the northern side, have been left as plain cylinders, which means that they never received the finishing touches.

Then against the northern and southern brick walls so as to enclose the whole line of the colonnades and forecourt on two sides the original architect placed a series of blocks still rough from the quarry and had them hewn to the size and shape required for pillars. Only three faces of each stone were worked as the fourth, being inserted in the wall, was hidden from view. But on the fourth side rough flanges several inches wide were left to grip the brickwork. These flanges were all carefully chiselled off from the five pillars, 23, 30, 15, 11, 16, when they were afterwards moved away from the wall, but in only two on the five, viz., 11 and 16, was the fourth face worked. No. 11 reserved the great triumphal inscription of

Scenes
in the
Forecourt

The columns of the forecourt are covered with cartouches and inscriptions, but these all date from the time of Thothmes III and later: in Hatshepsut's scheme they were to be left plain and unadorned. But the square pillars in the court were finely sculptured in relief, the subject being always the sovereign (alternated as it represents Thothmes III) receiving the symbol of life from the great gods and goddesses. In several cases the heads of the deities are too weathered to be recognizable, but in Nos. 1 and 2 are Amen-Ré and No. 3 Anubis, on 10, 11, 13 Horus, on 10, 16, on 15 and 17 a representation of Isis wearing the waspion on her brow, on 24 possibly Sakhis, on 25 possibly Montu and on 30 Horus.

Scenes
in the
Temple

On the front wall of the pylons are two fine reliefs, one on either side of the doorway, which represent the monarchs Hatshepsut (131) and Thothmes II¹ (132), each with the right hand extended to symbolize the offering of the temple and its endowments to the gods. On the south side (131) Hatshepsut is again shown, first between two gods and then alone, but on the north the corresponding scenes of Thothmes II¹ (132, 133) have been partly replaced by bad work of Thothmes III².

The pylons contain some of the finest reliefs in the temple (140), a scene in which Thothmes II¹ offers a pair of felines to the deities and a pair of cows. The cow in the lower register is being herded and a small boy rides between her horns. The corresponding scene on the north (141) once represented Hatshepsut offering a cow to a god,³ but the block containing the figure of the queen has been cut out. Next to it (142) is the coronation of Hatshepsut, who is kneeling in front of the god Amen seated upon his throne, while the god lays one hand upon her shoulder. A dwarf, possibly Tjeneti, and kneeling thus stands the high priest clad in the leopard skin. Next should be noticed the vertical lines of inscription on the adjoining doorway (143, 144) with the altered cartouches which have already been mentioned. Between the two doorways is the usual figure of the Nile god carrying a tray with offerings (145) and on the left of the central doorway (147) is the king Thothmes II¹, a young naked boy whom a god and a goddess take under their sheltering protection.

Scenes
in the
Sanctuary

In the sanctuary itself the original work has been almost entirely replaced by very inferior scenes of the reign of Thothmes III². Only one of the fine reliefs remains, No. 61, which shows Thothmes II¹ being led by the hand between a god and a goddess.

Passing through the doorway into the southern corridor we see on the left (65) the king Thothmes II¹ before the goddess Mekt, and on the king southern wall first Thothmes II¹ offering to a god (66), then Hatshepsut offering to a goddess (67), and then again the king offering to a god and a goddess at once. The doorway

leading out of this were originally, like all the other doorways, the cartouches of Thothmes 2nd and Hatshepsut. Through it we enter the Opetchodion, which contains a fine series of ceremonial scenes, damaged only by the alterations which Thothmes IV made to replace the figure and cartouches of the queen. Originally Thothmes 2nd and Hatshepsut were shown alternately in acts of worship before the great gods and goddesses in order. But the portrait of the queen has been scraped out and a very inferior painting substituted for it in every alternate scene. Thus while 73 and 75 are unspoiled, the royal figure has been erased and replaced in 74 and 76. In 76, however, the little figure of the queen's ka has been left undamaged. On the northern wall (77) the full length figures of Thothmes 2nd and Horus of Buhen are completely preserved, but the style is inferior and seems to betray the hand of the restorer. The east wall continues the series of scenes of worship with Thothmes 2nd as the sovereign in 78 and Hatshepsut in 79.

Scenes on the Opetchodion

The corridor on the north side of the sanctuary exhibits an unusual structural feature for it is divided into two parts of which the western is raised a little over a metre above the usual floor level. This forms a sort of mezzanine, which, no doubt, served as a store-chamber. In the eastern part of the corridor are two scenes, of which the northern (81) has been deliberately erased; it represented a king or queen with the little ka behind making offering to Amun-ge. The similar representation in 82 is undamaged. Being executed in stone instead of in raised relief both these are probably secondary work.

Corridor South of the Sanctuary

The exterior northern wall of the main building is sculptured with a series of representations of the king and queen alternately making various offerings to gods and goddesses. The blocks on which Hatshepsut was represented have been cut out and in one case (104) replaced with an inferior restoration. Beginning from the east end we see first (88) Hatshepsut offering young bulls to Amon, behind her is the symbol of her ka. In 89 Thothmes 2nd offers a shrine to Isis. In 90 Hatshepsut presents an offering table to Horus, Lord of Buhen. In 91 Thothmes 2nd offers white bread to Anukis. In 92 in much damaged scene Hatshepsut appears before the goddess Sefekh-Abwy, who is clad in a panther-skin. In 93 Thothmes 2nd is presenting a model of the temple to a goddess, at his feet is the ankh symbol with two arms holding a pot of incense. In 94 Hatshepsut (replaced) offers a shrine to Horus of Buhen. In 95 a king whose cartouche declares him to be Thothmes 1st is dancing before the goddess Satis. The cartouche, however, has been superimposed on another and as there are feminine terminations to the royal titles it is evident that the person represented is really Hatshepsut, for whose name that of her father has been substituted.

Scenes on the Northern External Wall

Column
No. 25
No. 26
No. 27
No. 28

The scenes on the southern exterior wall are of the same general character. In the east easternmost the king Thothmes 2nd offers to a god birds and cattle, the descriptions of which are written out in each group. The first row consists of three staves, four geese and three quails below which are three short-horned oxen, three staves and three staves. In the third row are two groups of three bulls, one head of which have remarkably long spreading horns. Next in row had been Hatshepsut with three staves on her hand standing before Isis. In row 4 a king pours libation on one to another table before Horus of Buhen. Behind the king is a ka symbol supporting a basket on which can be read the signs "carti-mast" which must be the end of the Horus named Thothmes Ist, this is probably original and not restoration. In row 5 the king Thothmes 2nd lays his right hand upon an offering table piled with staves of bread, the goddess before whom he stands has been erased. In row 6 Hatshepsut presented shrines borne upon sledges to Horus of Buhen. In row 7 a scene which matches row 6 on the northern wall, the king Thothmes 2nd holding a poble dance before the goddess Neith, whose figure has been erased.

Scene 10
Scene 11
Scene 12
Scene 13
Scene 14

This concludes the original scenes so that we may next describe the secondary scenes and additions of which the earliest belong to Thothmes Ist. It has already been said that the king presented the sculptures carved for Hatshepsut to make it appear as though they had been executed for himself, but in most cases he substituted himself with altering names and erasing figures without adding anything new. The chief exception to this is in the main building in the sanctuary where the northern wall No. 68 has a long scene entirely due to Thothmes Ist. The king is shown before the sacred barque with slaughtered cattle in front of him, the barque itself has perished, but the staves on which are depicted with the names "Merkheperu Thothmes" and "Horus lord of Buhen". To Thothmes Ist must also be attributed the atrocious painting on the end wall of the sanctuary No. 58 in which the king offers two staves and provisions to a god and the seated figures of 24, 26 and 27 in the Thothmeion. No doubt from the same hand is the ill-painted scene in the porch 44 representing a king seated between two goddesses. In the forecourt the only two hand works of Thothmes Ist are the great triumphal stela on 11, the reliefs on column 12, 13 and the tiles carved on vacant spaces on Hatshepsut's obelisks and reliefs.

Scene 15
Scene 16
Scene 17
Scene 18
Scene 19

On the Nineteenth and Twentieth columns there are numerous records carved on the pillars of the forecourt beneath the principal scenes. These are stelae of officials, vassals of Kush and important people and will be noted more fully in

the next chapter. The names of Ramesses 2^d, Merenptah, Siptah and Ramesses 4th are mentioned in these stelae, and the cartouches of Ramesses III, 4th and 5th are carved on the column No. 12. There is no mention of any king later than the Twentieth Dynasty, though it is suggested that the figures in the doorways of the pronaos (37-38 and 53-54) which are of unusual type may possibly represent Tihaka. They somewhat resemble the figure of the king on No. 90, which is a sculpture bearing no name but obviously portraying some Ethiopian king. We found the slabs of No. 90 built up by some one of the previous excavators in a frame of red brick between columns 24 and 25. They had evidently been put there only in order to be kept safe and as we did not hesitate to remove them to a place where they would not obstruct the view of the colonnade. We have now built them against the modern brick wall on the south side opposite column 24. It is to Mr. H. R. Hall that we owe the suggestion that this Ethiopian king is Tihaka.

Portrait
of a king,
conjectured
to be
Tihaka.

It seems, as was remarked in the last chapter, that the Egyptian colony of Buhen was abandoned at the end of the Twentieth Dynasty and except for this sculpture attributed to Tihaka there are no traces of any king or official of later date. But if the town was deserted the temple did not fall into ruins, for in the Romano-Nubian period the floor level was no higher than it had been in the Eighteenth Dynasty and the pillars and columns were unencumbered by rubbish. This is proved by the fact that on the very floor of the forecourt between pillars 17 and 21 there is a hearth with painted jars of Romano-Nubian pottery. Similarly on the northern exterior esplanade there are graffiti in Meroitic demotic incised on the lowest block of stone only a few inches above the ground. We may reasonably suppose, therefore, that the Ethiopians, who revered many of the same deities as the Egyptians, maintained the temple for purposes of their own worship, even after the Egyptians had deserted it. A few houses of Romano-Nubian date, possibly the houses of priests, stood round it, and from these we obtained several Meroitic ostraka and fragments of pottery. Some unique inscriptions in cursive Meroitic, which had been painted on column 27 of the forecourt, were so faded from the sunlight as to be almost illegible, but in order to preserve them we cut out the block and sent it to the museum at Khartûm.

Romano-
Nubian
Romans

In Coptic times the temple was still free from debris, for the Coptic cross has been incised on several of the stones of the pavement. Between the columns 25-29 on the west side of the forecourt are some traces which might be the remains of a screen wall, and the pillars 18, 19, 20 on the south and 17-21 on the north are connected by brickwork of a late date. This suggests that the forecourt may

Fragment
of Coptic
Crossing.

*Index
of Coptic
Occupation*

have been converted into a church and that the ancient Egyptian altar on the west of column 29 may have served as Christian ceremonial. But any evidence that might be conclusive on this point has been removed by the earlier excavators. There can be no doubt, however, that some of the doorways in the northern girdle wall are of Coptic date for we found the hinges to which they belonged adjoining the temple on the north-west corner, 1-2 and 1-3. And it is to be noted that the level of their thresholds is immediately above the top of the Romano-Nubian gateway. It may very probably have been the Copts who removed the roofing blocks and the upper courses of the main building, but until at least as late as the beginning of the Christian period, that is to say the 6th century A. D. the temple was open and unroofed.

CHAPTER III

THE TEMPLE OF HATSHEPSUT*

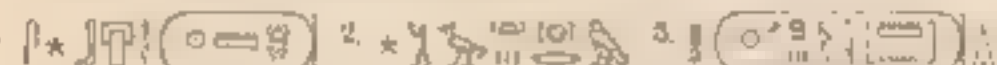
The entrance to the forecourt of Hatshepsut's temple is through a very insignificant doorway which is one of the worst features in the reconstruction carried out for Thothes (Pl. 1). The jambs are sculptured en creux with portraits of the king, who stands with his right arm extended as though in the act of presenting the temple and its endowments to the presiding deity. The northern jamb has suffered much from weathering, on the southern, however, the figure of the king, wearing the crown of Upper Egypt and holding staff and ankh, is well preserved (Pl. 9). In front of the king on two vertical lines is the inscription:

—  —

The Egyptian
on
the right jamb.

"Opening the endowments to Horus, Lord of Hohen."

and beneath the scene, in three vertical lines:





—  —

"The great door of Menkheperu (name). The people adore before Horus"
[King of Upper and Lower Egypt, Menkheperu, beloved of Amun, given life.]


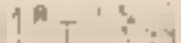
The third line is a dedication of a statue, one of whose names was Menkheperu. In the corresponding inscription on the northern jamb the first line has disappeared, but it is still possible to read: "The people adore before Horus." The son of Rê, Lord of diadems, Seti Menneptah like Rê. Beneath the scene on the north jamb is a brief graffiti in Merneptah's hieroglyphs.

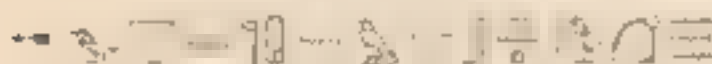
We will now proceed to describe the scenes inside the temple.

* For all the information contained in this chapter we are indebted to Mr. A. M. Blackman, Queen's College, Oxford, who has copied and translated the texts and interpreted the scenes. The chapter has been edited and arranged by us with Mr. Blackman's consent, but no alterations of importance have been made.

Above and behind the head of the deity are traces of his name, almost 4 w entirely erased, viz. . . .  . . .  . . .  . . .  and *triumphant*."

There was a colony of Nubia in the reign of Montuhotep called *Misy* (the Morgan Catalogue, Pl. 16, 871). But there is hardly room here for a name of that length.



(4) A king W.  holding a mace and staff in his left hand and wearing the ⁵ S crown of Upper and Lower Egypt, etc. his right hand extended as though offering the temple and its endowments to the goddess (Pl. 21). Above the king is  and in front of him in a vertical line




"All that enters the temple of Hathor here is *linsen* it is pure."


(Pl. 13 and 14, 10, 291)

Beneath this scene are two  (Pl. 13).

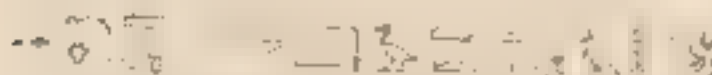
(5) The lower one is of Nubia, in the reign of Thothmes 3^d. The great triumphal inscription on the wall of Karnak (Pl. 27, 281) was cut under his supervision and there are two  in the temple, viz. 22 N. and 23 S. (cf. Sethe, *Feldzug v. Thutmosis*, 1905, and see also Brunsen, *Ancient Records*, Vol. II, 45 651-652). Nubia is represented kneeling with hand raised in adoration. In front of him are three vertical lines of  (Pl. 27).



"Be ye pure to Hathor here; *linsen* is pure here and



to the good god. The inscription, with the statue, is of smaller size than the best preserved group.



"Excellent example of the *linsen* group, and a very good example of Southern Egyptian Art."

(6) The lower one is of Hathor, in the reign of Nubia, in the reign of Ramses 4th. He is represented kneeling and holding the lotus and staff in his left hand, while

followed by two vertical lines of inscriptions:

S. W.



"Giving praise to Horus lord of Ithnu. Kissing the ground to



"the good god, by the King's son, the Controller of Southern Country, bearer of fan and crook upon the king's right . . . triumphs."

(a) A god \rightarrow S. joins the symbol of life to a king's name. The head of the god is completely weathered away.

(b) Beneath this scene is an exaltation of an official named Neferhor, in the reign of Sigah (see Pl. 11).

Neferhor stands \rightarrow with both hands raised in adoration.

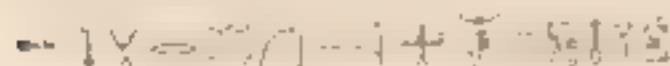
In front of him are six vertical lines.



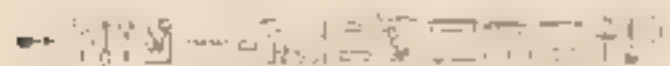
"Year 1 of the good god, Ramesses' Septuaginta, on life. Praise to thy ka."



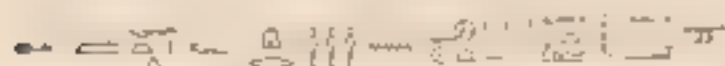
"O Horus, lord of Ithnu. May he send thee prosperity, health, a ready war-jar and love to be to of."



"The king's messenger to every country, priest of the moon-god Thoth, the scribe Neferhor."



"Son of Neferhor, scribe in the second office of Thoth, L. P. H.,"



"when he came with rewards for the officials of Nubia and to bring

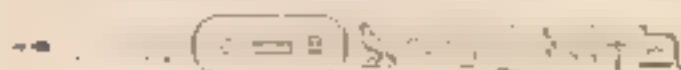
*For the unusual form of the name see Brasted's note in *Excavations* III, p. 277.

6 W. 


"the King [?] of Kish, [?] of the gold [?] of [?]"

A translation is given by Br. and in *Records*, III, 1643.

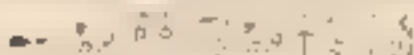
7 S. In a vertical line:



"Mentah, son of Hama; son of Hama, son of Hama"

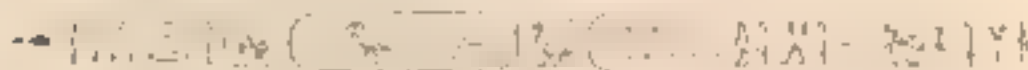
W. (a) A god, probably Hama,  starts the symbol of life to a king's nose. Both heads are completely weathered away.

(b) Though the inscription is of Piyav, and found in the reign of Siptah, giving the date of the third year of that king. Piyav is shown following the great rain Merder (see 17-18). Above the head of the rain-headed god in a horizontal line:



"Merder, son of Kish"

In front of and above Piyav, in a vertical line:



"Year three, under the name of the king Hama, son of Kish" the
punctuation in the king's right hand



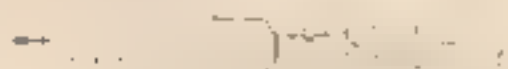
"king [?] [is] [the] [son] [of] [the] [king] [Hama] [the] [son] [of] [Kish]" the record of Hama, started in the [?]



"in the [?] [of] [the] [king] [Hama] [the] [son] [of] [Kish]" the land of Kish

A translation is given by Br. and in *Records*, III, 1644.

8 S. In a vertical line:

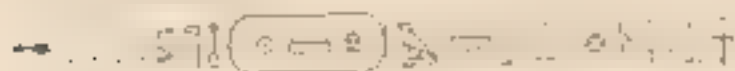


"[?] [is] [the] [son] [of] [the] [king] [Hama] [the] [son] [of] [Kish]"

A god \Rightarrow S puts the symbol of life ∇ in a king's nose. Both figures are now weathered away to below the shoulders.

In a vertical line:

9 S.



" Good god Mentuhotep, beloved of Hathor, gave life."

In a vertical line:

10 W.



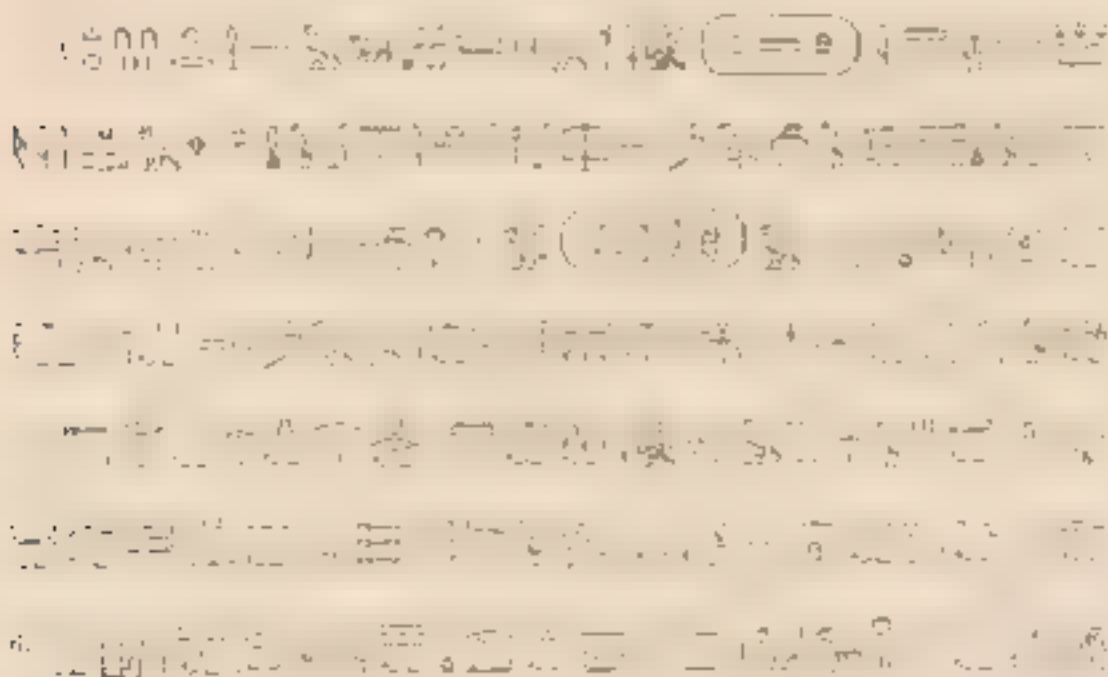
" (Mentuhotep) beloved of Hathor, gave life."

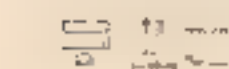
A king \Rightarrow W, embraced by a god (probably Hathor) who is hawk-headed and wears the double crown.

Horus \Rightarrow K puts the symbol of life in the king's nose.

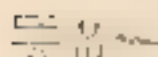
11 S.

A long inscription of Thutmose III, each essential line (11 x 11) engraved under the direction of the vizier Y-Nebu, no. 118. Published by Sethe in *Urk.* IV, 806. A more exact examination of the original only resulted in a few corrections. Restorations are in square brackets.]










in l. 3 is doubtless a mistake of the engraver. We should probably read *Wm on the*

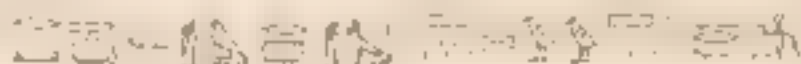


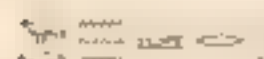

long
inscriptions
of
Thutmose III

After  Sethe reads . But the determinative is quite plain on the original.



After  Sethe reads . But there is no room for it on the original.

For the expression  to , cf. an inscription on one of the papyrus set up by Amenhotep III at Soleb (I. 47, III, 50). He made it as his monument for his father Amen, lord of the thrones of the two lands, who opened for him victory against all foreign countries.



 meaning that he should wear the "Pole of Horus" as far as the "Pole of Set." That which the ornament on the and  is at the foot of this good god" cf. also I. 46, III, 50.






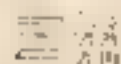
In l. 4 Sethe reads  but  is quite legible on the original.


 in l. 11 has been erased.


In l. 12 Sethe reads  | .

The sign  in l. 13 is a knife in a circular handle. See *Leipzig Hieroglyphic* p. 97.

In l. 14 Sethe reads  as determinative of  but  seems intended in the original.



at the beginning of l. 15 is referred to by Sethe's publication. When Schuler and Sternsdorff were at Halle in 1882 the determinative  was apparently still preserved.

In l. 17 before  Sethe reads .

Above this inscription are two scenes showing the king before a god. In the northern the god is standing, in the southern he is seated. The vertical line of inscription between the two scenes is too much weathered to be legible.

beloved of Mont," fighting for his army himself, that the two lands may behold; it is no lie. I came north from the house of my father the king of gods, Amun, who decrees me victory." The king himself, he set out, his mighty army in front of him, like a flame of fire, a valiant king who performed (feats) with his mighty arm; of valiant hand with out his equal, slaying the foreigners; vanquishing the Retenu (Rtnt) 's, bringing their chiefs as living captives, their chariots "wrought with gold, yoked to their horses. The number of the tribes of the Tehenu bow down to the name of his majesty; then salute upon their backs, fawning "as do dogs, brought that there may be given unto them the breath of life. Good god, valourous and watchful, Lord of Fowls like Horakhty, great of fear, mighty of terror," in the hearts of foreign lands. All countries are under his control; the Nine Bows are before him, under his sandals, the king of Upper and Lower Egypt, lord of the mighty arm, sole champion." Thebes^{for 141} his father Amun-re, son of Rē Thutmose, Beautiful of Forms, beloved of Horus, lord of Buhen, given life.

"The hereditary noble, the prince Horus, lord of the two lands; king's son, overseer of southern countries, Nobi." See § 8, 11 N. 23 S.

(a) Horus puts the symbol of life to the king's nose (see Pl. 14)

11 S.

(b) Beneath this scene is an *ex voto*, showing *usutah* — B, who was Ubastet. Behind the king is a fan-bearer — E, whose name is destroyed (cf. Breasted, *Records*, III, § 651).

Above Ubastet in four vertical lines

—  —

"Ubastet, lady of Hubastis, wife of Rē, mistress of the e. d."

3  4 

"Hathor, the god's mother, lady of heaven, mistress of the Two Lands."

place on the Northwest frontier of Egypt. (See also Pl. 1-3). This inscription at Thebes¹⁴¹ is the only place I can find where *Asiat* (*Asiatic*) seems to be meant. Though perhaps, in the inscription on the Constantinople obelisk (L. 1. 111) *Asiat* is *Asiatic* in Asia, i. e. "to take Wp 1 *Asiat* *ph* *et* *Nem*, making me know him as far as the Horns of the earth, the marshes as far as Naharin." *Ph* in this case would be in opposition to Wp 1 *T*.

11 S.

Above Siptah →



"Lord of the Two Lands Beloved-Setepher."

"Lord of Buhen Beloved-Siptah."

Above the last cartouche is two vertical lines:



"Flower of the sun upon the king's right hand, king & messenger to Serra and Kark."

E

The inscription in front of the king is destroyed.

Horus → N. embraces a king and puts the symbol of life to his nose.

12

The cartouches of Ramesses I repeated alternately, form a band that encircles the column. The signs on the western half face →, those on the eastern half ←.



"User-mast, beloved of Amun. Rameses, ruler of Heliopolis."

9.

On the south side above these cartouches of Ramesses Ist are cartouches of Ramesses 4th and Ramesses 5th.

(b)



"Ramesses 4th Bel-mast-ef-chon of Amun, Rameses beloved of Amun, prince of truth."

"Ramesses 5th. User-mast-ef-chon Rê-khati-mafé, Rameses beloved of Amun, Amen-her-khepeshef."


Between the two groups of cartouches "Son of Re, of his body (f), whom he loves."

(c) On the south side below the band of Ramesses III's cartouches is an oval of a "great overcoat of the Harim of Amun" named Hekmanon. The signs are badly shaped and cut, and were read with great difficulty. The surface of the stone is also very weather-worn. Hekmanon stands W. — holding fan and crook in his left hand, his right being raised in adoration of a god who has been destroyed.

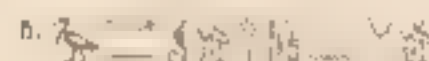
In 5 vertical lines:

a. 

" long legs, and also power and love for the lot of the heart of the fan upon the king's right, commander of the seven* of Kheh."

b. 

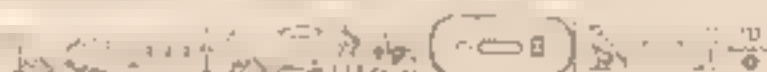
"king's words, great strength, great overcoat of the harim of Amun, chief priest of Amun etc."

b. 

"Hekmanon, son of the wife of Amun."

In a vertical line down the whole length of the column:

W.

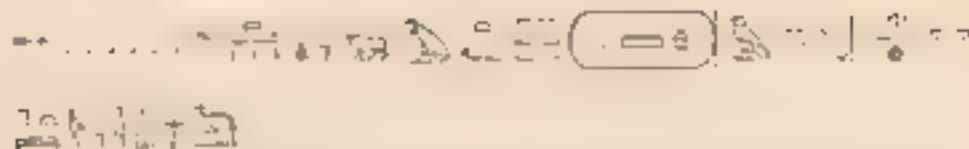
a. 



" with his strong arm mastering his feet king of Upper and Lower Egypt, Menkheperre, beloved of Hathor, lord of Buhu, given life for ever."

* For this title see Gressitt, *Siam and Siam-people*, Pl. 100, Lohman, *Namensverzeichnis*, Suppl., 1922; De Morgan, *Archéologie*, p. 48, no. 404, p. 102, 288-289.
 f. f. Hugsch, *Uebersicht*, 1904 and Suppl., 1915.

128. In a vertical line:



"... *dyadems like the bull* or *lion*, *another, lord of the Two Lands, Menkheperê*; *beloved of Horus*, *lord of Punt*, *lord of Sais*, *give life, prosper*."

129. (a) *Hor*, *reay* = *Horus*, *endurance* = *king* (see Pl. 15).

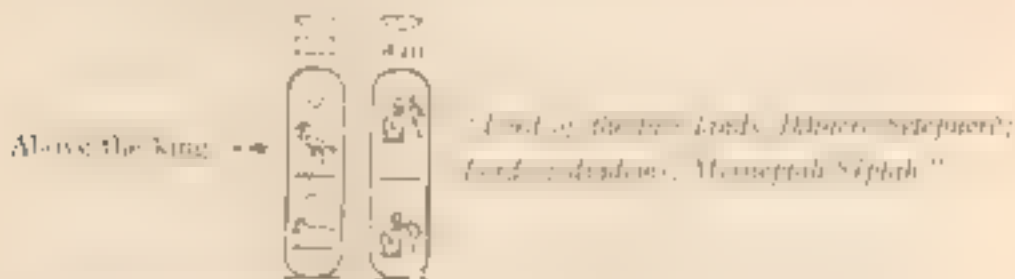
(b) *Hor*, *another*, *reay* = *another*, *reay* = *endurance* (see Pl. 15), showing Siptah receiving the *reay* of his from *Horus* of *Hahy*.

Under the *dyadems* above the king, *head* = *writer*, " *Hemj* *hadju*."

Behind the king:



"*All protection, life, stability, and good fortune, all health, all happiness behind him, like this every day*."



By a vertical line above *Horus*:



"*Horus*, *lord of Punt*, *give life*."

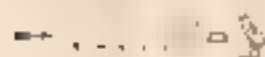
In front of *Horus*, in a vertical line:



"*Unto thy wife, and thy son, lord of the Two Lands, I have given thee all labour, all victory*."

(a) Horus \rightarrow puts the symbol of life to the king's nose. At the top 13 W. of the scene are two mutilated inscriptions in vertical lines, viz:

Above the god:



Above the king:



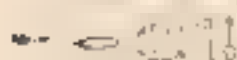
"*Strong and renowned* [in *Helen*], *Hatshepsut*, *Thutmose*, *Beautiful of Form.*"

Beneath this, in a horizontal line:



"*Rejoice, given life, stability, happiness, and joy like Ké for ever.*"

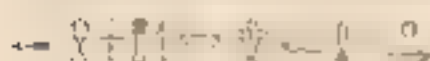
Between the faces of the king and Horus:



"*Unto thy nose, O good god.*"

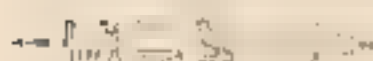
(b) Beneath this scene came added by Ramesses III showing that king before Horus of Heliopolis. The king has been cut over in earlier figure that had his right hand raised in adoration, and in his left held a lotus and ankh.

Behind the king in a vertical line:



"*All protection, life, stability, and happiness, behind him like Ké every day.*"

Above the king in a vertical line:



"*Protect to her Horns, lady of Heliopolis.*"

12 W.

Above the king are also on an
 estagure the two captives:



"Circumcised, beloved of Amun,
 Harnesi, ruler of Heliopolis."

In front of the king in a vertical line:



"Offering bread to the Horus."

Above Horus in a vertical line:

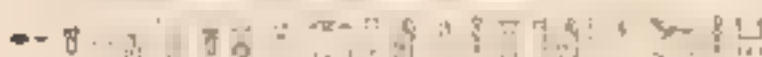


"Horus lord of Hibeh, lord of marion."

K. (See Pl. 121)

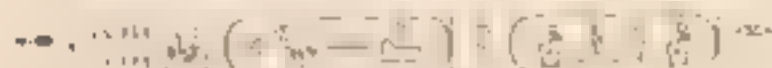
An official, an official named Ukhkhesem in the reign of Siptah. He is
 represented kneeling with a lotus flower and a lotus flower.

Above Ukhkhesem in four vertical lines:



"Chief lady of Hibeh, mistress of the estate, mistress."

In front of and below Ukhkhesem in four vertical lines:



"Viceroy of the Empire, Upper and Lower Egypt, Hmeh-Setepher, son of Rē
 Merneptah Siptah, made."



"the first character of his majesty, king's messenger to every foreign country,"

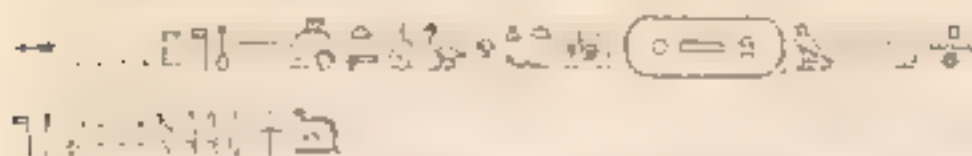


"Ukhkhesem, son of the King's Son of Kush Horu."

(cf. Breasted Records III 149a.)

[13] J. Singer and A. Vietoris, *Lect. on topol.*, Springer-Verlag, 1967.

1455.



"... first god, lord of gladders, son of Ymou, upon his throne, king of Upper and Lower Egypt, Mnephertem-hotep; Horus, lord of timbers, great red prince of the two lands, as on his throne."

The lower part of the column is surrounded by a band formed by the out-striking of Ranges 16'. They are the same as on 12, but all the signs have \rightarrow .

In a simple yet convincing way,

44



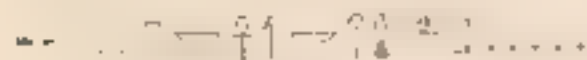
1. *The Two Architects*, pp. 13, 14, and 15. *How Good of Babylon, Land of Heaven, or, of Hell, Hereby*.

(a) According to Table 1, $\mathbf{F} = \mathbf{0}$ is the only equilibrium for the rigid body. $\mathbf{F} = \mathbf{0}$. The force is represented by a single point mass.

At once the king writes confidentially to the House, sends a strong bail (received in *thirty*), followed by the reconstruction of *Monopsony*, *Monopoly*, *Monopolistic Form*.

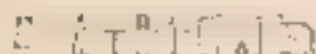


Among the goals are studies of two complementary areas of postgraduate studies:



“... all ... all life and happiness, etc. etc.”

168 Above the head of the king and goddess:

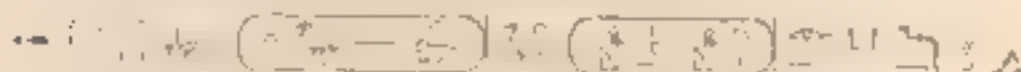


"given life, nobility and happiness like *Ré* for ever."

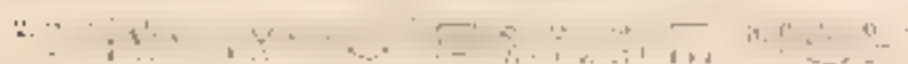
169 Below this scene is an example of *Hery*, son of *Kem*, an official of King Siptah (see Pl. 15). He is represented as kneeling and adoring *Uatchet*.

The inscription above the goddess is destroyed except her name, *Uatchet*, which is perfectly legible.

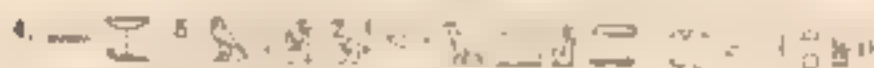
Below it and behind *Hery* are six vertical staves:



"Year 4 of the king: *Uatchet* and *Uatchet* kept, *Uatchet*, *Sahemut*, son of *Ré*, *Merneptah*, *Siptah*. Made by the god *Hery* for ever."



"of his majesty the king: *Uatchet* and *Uatchet* established the chiefs upon their throne, until *Siptah* for ever."



"his lord, *Hery*, son of *Kem*, testified and"



"of the god *Hery*, son of *Kem*, testified and *Hery* did all that he said."

A translation is given by the author, *Kem*, p. 111-112.

170 A god, probably *Hery*, is shown seated before the king's nose.

On the inscription only a few signs between the god and the king are preserved, viz.



"Adoring the god four times."

171 A king is shown seated before a god. The figures are weathered away to below the waist.

22 3. Above Sesotris:



"... the ruler of the Two Lands like Kheper" *Kheper*

Above the king

→



[Name full, preceded by *Thoth*]

Menkheper

Thutmose

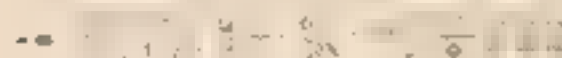
Reantipod of Horus

Above the king and queen



"... the ruler of the Two Lands like Kheper" *Kheper*

Under the same [Name full, preceded by *Thoth*] in Pl. and who was a copy of Nubia in the region of [Name full, preceded by *Thoth*] with his hand raised in adoration. In front of him are three [Name full, preceded by *Thoth*]



"... the ruler of the Two Lands like Kheper" *Kheper*

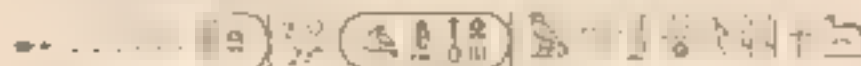


"the prophet, the ruler of the Two Lands like Kheper" *Kheper*



"of the king in Nubia" *Kheper*

22 5. In a vertical line



"Menkheper, son of Kheper, Thutmose, Reantipod of Horus, beloved of Horus lord of Duben; living for ever"

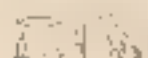


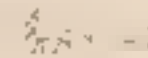
These cartouches have been altered by Thothmes 3^d.

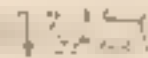

(a) Sath \Rightarrow E puts the symbol of life to a king's nose.

23 S.

The inscriptions are destroyed.

(b) Beneath this scene there is an exhort. of Neth (cf. 22 N) Neth kneels \Rightarrow In front of him are three very much damaged vertical lines of inscription.

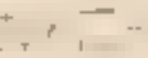
1.  ... 2.  ... 3.  ... 4.  ...
"bearing proba good yet Fin. acc. duty of his out excellent noble"

5.  ... 6.  ... 7.  ... 8.  ...
"before of his lot I have seen it every of South in country, Achi"

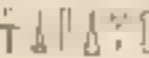
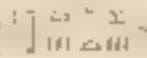
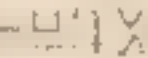



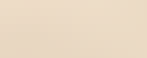
(a) Merh S. \Rightarrow puts the symbol of life to a king's nose.

23 I.



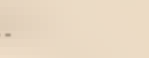

(b) Beneath this scene is an exhort. which, though the weather worn, is of an official or long Suptah. Only the upper part of the column is intact above the waist remains. The lower section is covered with a very much damaged inscription. In front of him are three vertical lines of inscription and the column is of Suptah. The inscription continues above the head of each horizontal line. It is very fragmentary and most difficult to read, but seems to be a prayer.

1.  ()  ... 2.  ... 3.  ... 4.  ...

"The king of Upper and Lower Egypt, Nubia, Nubia, son of Re, Horus, Lord of Heliopolis, living in ground, the god of the god."

5.        ...

"life, prosperity, health, a healthy son, parent, and son, for the lot of the king's messenger"

6.      ... 7.    ...

"[As every foreign country] [to establish the and] the king's son in their positions, the first character of [his Majesty] [y. of the court]"

Nos. 24 and 25 have no scenes or inscriptions.

24, 25

* Cf. 26 S. line 1. and Breasted, *Ancient Egypt*, III, 241.

† Cf. 26 S. line 5.

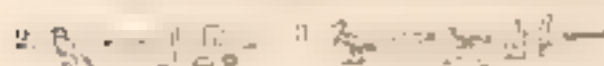
An *ex voto* representing three land-barers \rightarrow adoring Horus of Buhen at W (see Pl. III).

Behind the god stands a priest \rightarrow with a cake or offering in his left hand, his right hand being raised in adoration. The foremost of the land-barers also appears to be holding a similar cake. Note that all three wear leopard skins.

Above the priest who stands behind Horus, in three vertical lines:

1. \rightarrow 

"For the ka of [the deceased], the priest, the H. H."

2. \rightarrow 

"of Horus lord of Buhen, Pthah, triumphant"

Above Horus, in two vertical lines:

1. \rightarrow 

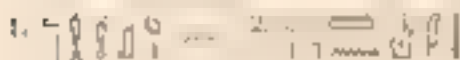
"An offering which the king gives, Horus lord of Buhen"

Above the first land-barer, in three vertical lines:

1. \rightarrow 

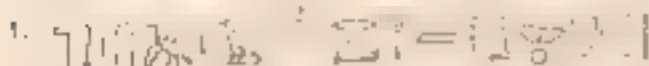
"For the ka of the deity, priest of Horus lord of Buhen, Pthah, triumphant"

Above the second land-barer, in two vertical lines:

1. \rightarrow 



"[The] priest of Pthah, Seamen, triumphant"

Above the third land-barer:


1. \rightarrow 















"The second priest, Pthah, on his triumphant"

Beneath these are vestiges of another *ex voto*, illustrated except for traces of two figures standing before a god.

*The sign  before  is in red paint and not expressed.

†B. in following list: 12 B. (200) "14"

‡ is in hieratic

- 32 (see Pl. 19). Each of the gods has  hanging from his hand. In the case of the god on the left the symbols  with  beneath each are suspended from . In the right hand example the symbols are , , , , , , separated from one another by , while immediately under  without intervening  is .

cf. a similar scene from Sennebi, l. D. 111-551, and another from Kammeh Id. 59a.

Behind the king on the right



"All protection, life, stability and happiness behind him like R!"

In front of the king



"In front of him, all protection, life, stability and happiness like R!"

Behind the god on the left



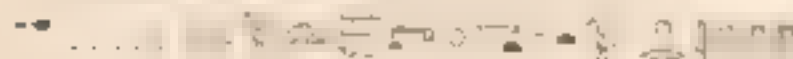
12 "Behind him like R!"



Behind the god on the right



"All protection, life, stability and happiness behind him like R!"

Immediately after this



Here the inscription has been altered and the original signs that still show are indicated in bold black type. In the original  partly overlaps .

- 33 (Pl. 17). Hathor not wearing the double crown and holding a staff and pear-shaped mirror in her left hand, stands with right arm extended, in the attitude of presenting the temple and its contents to the deities who dwell within it. (cf. Nianke, *Das 12. Nubien* IV, Pl. 95.)

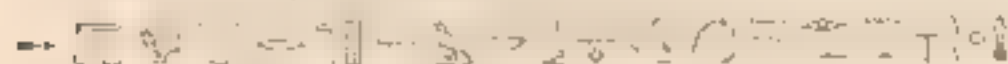
Above the queen:

33



" . . . Beloved, given life like Re forever "

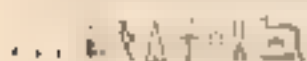
In front of the queen and behind her:



" The offerings, all that enters out the temple of Hathor, Lord of Bubon, it is pure; that she may live like Re forever " (Naxos, *Temp. of Hathor*, V, Pl. 137.)

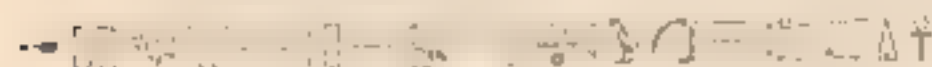
The hieroglyphs 2' 3' 4' wearing the crown of Upper Egypt, not in the same attitude as Hatshepsut in 13; see Pl. 137.

Above the king's head:



" . . . Beloved, given life like Re forever "

In front and behind the king:



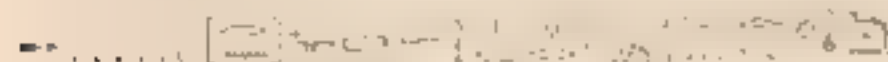
" The offerings, all that enters out the temple of Hathor, Lord of Bubon, it is pure; that he may be great like Re "

Badly executed restoration of Theban 13; see Pl. 137.

35

The king is embraced by a god who is seated.

Behind the god:



" . . . the great name of his majesty upon it in election, that he may act like Re forever "

Behind the king:



" . . . all life, stability, happiness and wealth behind him; He leads all the people that they may live "

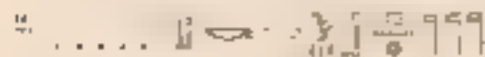
The king is represented as being led into the presence of a goddess, perhaps Isis (see Pl. 137).

(cf. the scene in the temple of Senmut given in L., D., III, 56.)

36 In front of the goddess:



" Thutmose, Beautiful! Forms; come thou unto us!"



" thy . . . the lords of huben, the gods"

(For a similar inscription of the scene in L. D., quoted above.)

37, 38 Possibly this may be a representation of Tithaka. Compare the sandals with those in 32.

39 The king S, holding a staff in his left and a mace in his right hand, stands behind a bull and two cows, ranged in three registers (see Pl. 18).

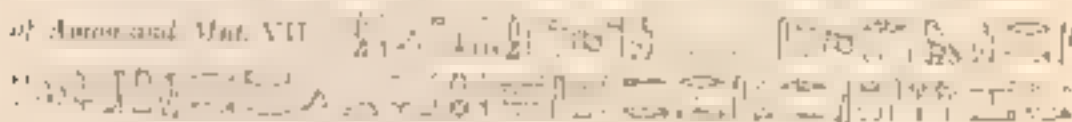
Facing them is a god N . There were perhaps two bulls originally, but the upper part of the scene is destroyed.

In horizontal lines above the first cow:



Inenty, the white goddess of Nekhen."

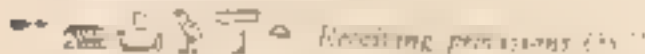
The word *Hft* combined with *Nkr* is a regular title of *Nkr*, the tutelary culturo-goddess of Upper Egypt. For this goddess associated with incense see *Religion of Amen and Unt*, VII.



"The incense comes, the perfume of the east comes . . . the perfume of the eye of Horus approaches thee, as beauty does; the perfume of Nekhet (nephthys) approaches thee that come forth from Nekhet into modern El Kab. She washes thee, she adorns thee, she makes her seat upon thy hands."

This cow and the bull in the register above have offerings (?) laid before them on a mat.

Above the second cow:




Receiving provisions (?)

For this word cf. . Pyr. M. 704. W. 499. Pl. 11, 21.


This cow is licking her calf, while a small boy rides on her head holding her horns in his hands.

Behind the king:

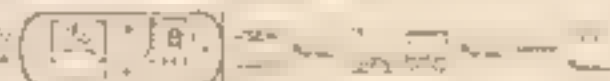
..... 

"..... Appearing as king of Upper and Lower Egypt upon the Horus-throne, like *Ré potater*."

Behind the gods:


..... 

"..... [more than] that which any king has done (which came into being since primordial times, but then in reality for ever."

..... 

40

"..... Daughter of *Ré*, Thutmose. He made it as his monument for his father.

²..... 

"..... of good white stone of Nubia that he may make for himself life and happiness for ever."

.....   
..... 

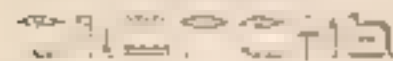
41

"..... Son of *Ré*, Thutmose. He made it as his monument (Thutmose 2nd) of good white stone of that he may make for himself life and happiness."

Hatshepsut offers incense to a god. The block that bore the queen's likeness has been cut out.

42

In front of the queen:

..... 

"Burning incense that he may live in happiness for ever." Lit. "that he may make life," etc.

Bad work of Thothmes III. A goddess seated on a throne embraces a king.

43

*The cartouche has been altered and the personal suffixes of verbs changed from feminine to masculine.

Behind Anon and the kneeling queen in a vertical line:

45



"[I have put thy fear] in the hands of the Anathor: 'o, thy terror in the bodies of them that know [thee] not.' (c; Sethe, *Urkunden*, IV, 2000.)

The last sign has been altered. Wasp-like thorns () have been added, but in paint and they cover one leaving the other clear. (Sethe, *Urkunden*, IV, 2014, reads ; but the signs given here are quite clear in the original.)

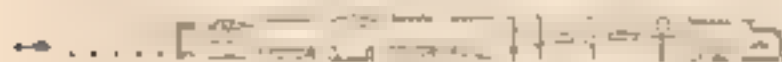
In front of the priest,



"The great *Isis* (*Isis*) who lives (*Isis*) in the white crown, receiving the red crown."

has been superimposed upon the cartouche has been changed to that of Thothmes 3rd and surely all the signs have undergone some alteration.

Behind the priest





"... which do far exceed thee, thou first generation ruler."

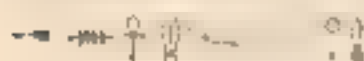
This inscription has been altered. After there are traces of .

The king N. before 1 god . The scene appears to have been altered by Thothmes 3rd. The sculpture is bad and the painting careless. No details are put in and in many places the colors are smeared beyond the edges of the signs and figures, on to the background.

46

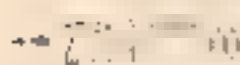
The king S.  offers two *O*-vases of wine to a god seated. In front of the god is a tray of offerings consisting of fruit, vegetables, a duck, a cat's head and cakes of bread. The usual parts of meat were probably also represented in the part now destroyed. Beneath the tray are a vase with a long curved spout placed on a wooden (?) stand, and two *W*-cups upon tall pottery (?) -shaped stands (see Pl. 21).

Behind the king



"All protection and life behind him, like life for ever!"

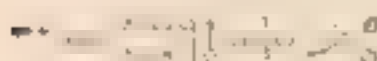
In front of the king




"Giving wine!"

The painting and sculpture are badly executed reproductions of Thothmes, 3^d.

A king embraced by a goddess who was represented as putting the symbol ⁵⁰ of life to his nose as we can see by the accompanying inscription, in a vertical line, behind her.



"Unto thy nose, a good god, life, strength, health!"

A long scene representing the king before a sacred barque.⁵¹ In front of him ⁶⁰ are the mentioned cattle with their legs tied. Two are still preserved intact and there are traces of a third almost entirely destroyed. Judging from the joints placed above the second and third cattle, some of the carcasses have already been cut up. Next to these is a large *W*-vase with a long spout, placed upon a wooden (?) stand, and following this two *W*-cups on tall pottery -shaped stands. Next in order is the stone altar-shaped rest for the sacred barque upon which are engraved the names of Thothmes, 3^d. ⁶⁵ A similar scene from Senmut, I., Pl. III, p.

⁵⁰ The barque has been completely destroyed. Only the stand on which it rested remains (see Pl. 22).

40

Behind the king

→ 

"... all life, stability and happiness behind him like Kt"

In front of the king

→ 

"... all life, stability and happiness in front of him like Kt"

Above the second victim  "A young longhorned ox"

cf. M. A. Murray, *Nubian Hieroglyphs*, Part I, Pl. 12


Above the third victim  "A young cow (bull)"

See also on 126 p. 75 and M. A. Murray, *op. cit.*, Pl. 121

Inscriptions on pedestal of seated Nubian



"... all life, stability and happiness in front of him like Kt"

The king  "A young longhorned ox"



Immediately behind the pedestal

→ 

"... all life, stability and happiness in front of him like Kt"

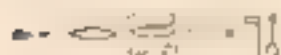
 "A young longhorned ox"

"... all life, stability and happiness in front of him like Kt"

A king advances W. , his right hand being held by a god and his left  by a goddess.

The work is of the good style of Hatshepsut, & probably represents Thothises 2nd.

Beneath the clasped hands of the king and god

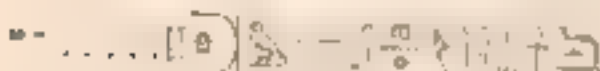


"I am thy mother & god and"

Behind the goddess



"... the ... in life and happiness ... thou shalt be as thou art for ever."



62

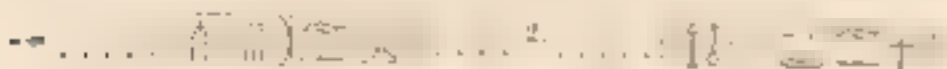
"... Hathor, beloved of the ... of the ... Hathor, goddess for ever."

The cartouche is an *exemplum*. There is a second of a similar termination after *my*, so the original name was probably that of Thothises 2nd.



63

"... She with Hathor, as mother, ... Hathor, goddess for ever."



64

"... Hathor 2nd (H), she made it as ... Hathor, goddess for ever."

65 and 66 were originally of course, dedicated to Hathor, goddess of Hathor.

In front of the king

12. *Id.*

.....[]

[illegible]

1941-1942 5.10. 1941

[illegible]

be the m in all the distributions and hence, by the R_4 for \mathcal{L}_1 , it

$$[1, 2, 3, 4, 5] \rightarrow [2, 3, 4, 5, 1] \rightarrow [3, 4, 5, 1, 2] \rightarrow [4, 5, 1, 2, 3] \rightarrow [5, 1, 2, 3, 4]$$

— 115 —

117 happens and in this regard let the *ku* set us an

$\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

nl

"... being in Upper and Lower Egypt, however, (Papyrus 27), believed for and is there in the world of Papyrus."

$$2. \dots 2^{\frac{1}{2}} = \sqrt{2} = 1.41421356237 \dots$$

^a *Common* in *W. of Dry body* *Indubious* in *the* *Upper* *Side* *of* *Forest* *of* *Savoy*, *midway* *of* *Southern* *Elphindus*.

1945

340

believed for some of the most recent origin, believed for some of
 [Society member with Southern Hemisphere]

$$+ \frac{1}{\sqrt{\pi}} \left(\int_0^x \frac{f(t)}{(x-t)^{3/2}} dt - \frac{f(x)}{\sqrt{x}} \right) + \frac{1}{\sqrt{\pi}} \left(\int_x^\infty \frac{f(t)}{(t-x)^{3/2}} dt - \frac{f(x)}{\sqrt{x}} \right)$$

71

"... king of Upper and Lower Egypt, Amenemhat, Thutmose 2nd believed in the 1st of Hery, lord of Hahem; in the 2nd of Amenemhat.

The cartouche is on an onasure. The original name must have been Hatcher's on account of the ~~temperament~~ *temperament*.

Hatchepout. — W. changed to Th. chrys. 2nd offers a bandage to a goat ¹² standing.

73 Thothmes 2^d before a god (see Pl. 321).

Behind the king:



"... appearing upon the Horus-throne, like *Rt* for ever."

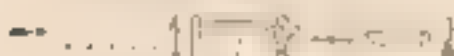
In front of the king:



"... in the ^{throne} ^{palace} that he may be given life for ever."

74 A king, originally Hatshepsut, before a god (see Pl. 221). The restored figure of the king is bad and the painting is very coarse. The signs and the figure of the god, Hatshepsut's work, are in excellent style.

Behind the king:



"... all happiness and health behind her like *Rt*."

The latter *h* "behind" is imperfectly erased.

In front of the king:








"Naten your body. Take to the shoulder. Four circles four times. Twice pure is Horus."

Behind the god:

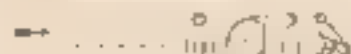


"... give (thy name) among gods, that thy name amongst the living that thou mayest be given life."




cf. Sothe, *Lebanon*, IV 201.  after  is imperfectly erased. The



 after  has been erased and a very badly cut  superimposed.

75 Thothmes 2^d before a god (see Pl. 231).







"... four times. Twice pure is Horus."





















A king  N., originally Hatshepsut, before Horus of Hohen (see Pl. 23). ⁷⁶
Behind the king is his ka in human form holding an ostrich feather  and the usual staff terminating in a man's head (cf. L. Pl. III. 217). Upon the head of the ka the symbol  upon a perch supported the king's Horus-name which is broken away.

On the grille of the ka-figure is  , "the king's ka."

Behind the king is the end of the usual formula:


















   

In front of the king:



                   

"*Thothmes, Take to my shoulder towards him four times. There pure is Horus*"























Behind the god:


































"*that thy heart may be joyful, that thou mayest lead the living, like Re for ever*"

Thothmes 2nd, W.  before Horus who is standing  H. (see Pl. 23). ⁷⁷

Above the king





In front of the king:


"*An offering when the king ences: A thousand of bread and beer, A thousand of flesh and fowl. A thousand of everything good and sweet*"

Above Horus:

(En creux) A king, W , completely erased, before a god who stands  E, holding  in his left and  in his right hand. Between them are two offering tables indicated in paint, as was also probably the figure of the king over the erasure. Behind the king there are traces of yet another figure, the ka, which has been almost completely hammered out.


Behind the king was a vertical line of inscription now erased.

(En creux) A king,  W before Horem¹ (Haten). Behind the king is his ka, a human figure carrying the Horemname destroyed on his head. He resembles in every respect the ka-figure in 36.


Behind the king

 life behind him like K¹!"

In front of the king


"to Horem lord of Hutten, that he may live for ever."

Behind the god


"the great Friend that thou mayest live like K¹ for ever."

The scenes 81 and 82 are fairly cut and quite different to the coarse en creux work of Thebanes 3rd in this temple.

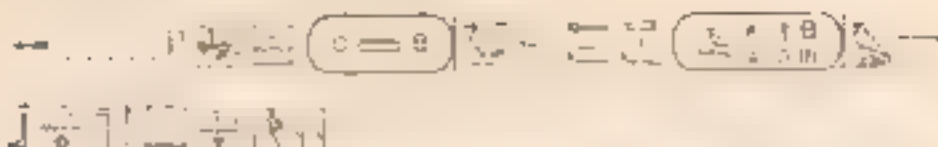
All the inscriptions upon the columns on the north and south sides of the main building seem to have been hammered with. It is difficult to say to what extent, as the surface of the stone is so weathered. But it looks as though an earlier inscription has, in many cases, been erased and a later superimposed. In certain instances the later inscription has never been added and the erased surface is left plain to see.

In a vertical line, incised




"... blessed of Mont; strong of heart, mastering the foe, king of Upper and of Lower Egypt, Menkheperre, beloved of Horem lord of Hutten, given life for ever."

84 In a vertical line, raised:



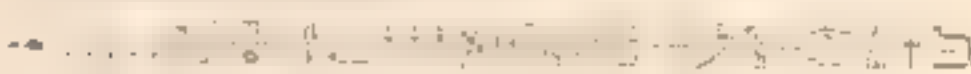
"king of Upper and Lower Egypt Menkheperre, son of Isis, of his body
when he lives, remains beautiful forever, blessed of Horus the great god, lord of
the South Land."

85 In a vertical line, raised:



"Horus of his lotus, king of Upper and Lower Egypt Menkheperre,
blessed of Horus the great god, remains beautiful forever, blessed of Horus the great god, lord of
the South Land."

86 In a vertical line, raised:



"Horus of his lotus, king of Upper and Lower Egypt Menkheperre,
blessed of Horus the great god, remains beautiful forever, blessed of Horus the great god, lord of
the South Land."

87 In a vertical line, raised:



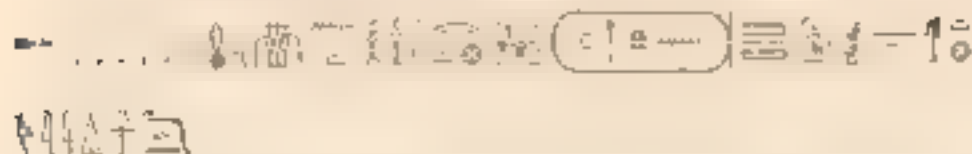
"Horus of his lotus, king of Upper and Lower Egypt Menkheperre,
blessed of Horus the great god, remains beautiful forever, blessed of Horus the great god, lord of
the South Land."

88, 89 Blank.

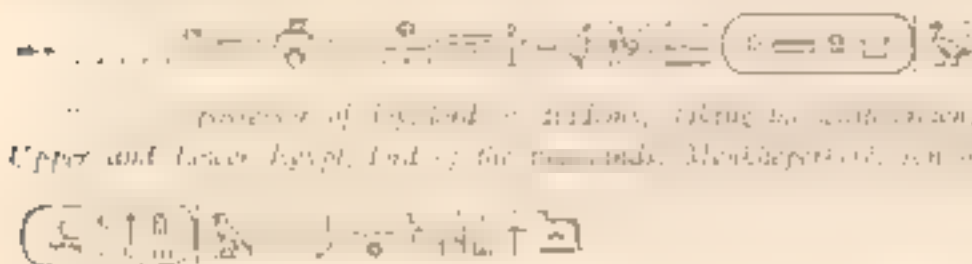
90 Block 90 contained on stone in a somewhat different form than that of the other
scenes in the temple. Knowing that the god, so PT 240 is represented a king
whose features strongly resemble those given in the portraits
already known. It seems possible that there may be the remains of a temple or
chapel of which there are no other traces remaining. The king offers a vase of
wine to the seated god, who holds the symbol of life to the king's nose.

In a vertical line, oriented:

91



"... like him who is in Thebes, a sacred quarter of Hermopolis. Thoth, Thoth is Thoth, king of Upper and Lower Egypt, Underkeeper, beloved of Mont, lord of Thebes; given life for ever."

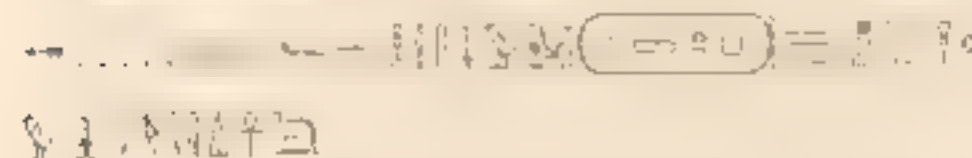


"Thutmose, beautiful of form; beloved of Horus, lord of Iuneh; given life eternally."

93, 94

[Damaged—erased.]

95



"Amenhotep, great of name, king of Upper and Lower Egypt, Menkheperhen, beloved of Ankhaf, mistress of Southern Sakhmet, given life for ever."

96, 97

Blank or else the inscription has been erased.


98

(See Pl. 25.) Hatshepsut — W. — — W. — — to a god. The bulls are secured by ropes attached to their fore legs and the queen holds the ends of the ropes which terminate in . Behind her is her ka-symbol. (For the scene cf. Naville, *Deir El Bahari*, VI, Pl. 161.)






The colour of each bull is written in front of him, i.e. "red," "white,"

"black," respectively.

98 Behind the queen:

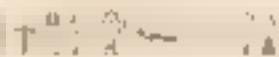
... 

"... Behind the queen is an infant, happiness and health; my heart being beyond love for a man."

The  is an alteration of . The  of  was originally  and is cut off by the pressure of the lotus symbol.

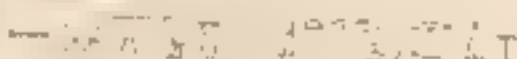
99 The child  - W.  [?]

Behind the child:



... 

"... Behind the child are happiness and health; my heart being beyond love for a man."

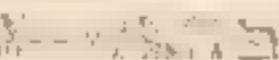
In front of the child:

... 

"... Behind the child are happiness and health; my heart being beyond love for a man."

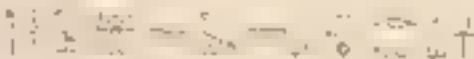
100 Hatchepout  - W.  The block that has the group of signs  is

Behind the group:

... 

"... Behind the group are happiness and health; my heart being beyond love for a man."

In front of the group:

... 

"... Behind the group are happiness and health; my heart being beyond love for a man."

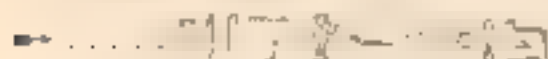
 is a variant of the form of the sign in the original. It represents

a woman, but is not identical with  -  -  - . (See Griffith *Hieroglyphs*, p. 34, Fig. 100.)

Thothmes 2nd → W. offers white bread to Anukis

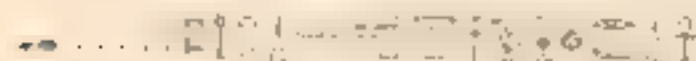
101

Behind the king



"... all happiness and health behind him, like Kt for ever!"

In front of the king



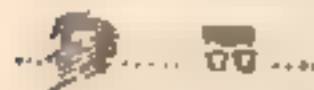
"[Offering] white bread to Anukis mistress of Southern Elephantine, that he may be given life."


Hatshepsut → W. before a goddess. In this case also the block bearing her portrait has been removed. The whole scene is so damaged and weather-worn that scarcely any details are discernible. The goddess is probably Serket, for she wears a panther skin, the two paws and tail of which are still visible.

Behind the queen:

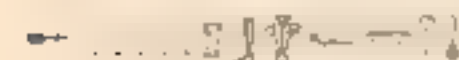


In front of the queen:



The king is depicted as presenting the model of a temple to a goddess (see 103 Pl. 25). What is left of the offering shows a gateway and the lower part of an oval which doubtless represents the wall of the temple enclosure. The king holds a long staff and mace in one hand; of the latter only the stick remains. In front of his feet note the symbol , furnished with two hands offering a pot of incense.

Behind the king is the end of the usual formula







Behind this is the *ka*-symbol on a pole supporting the Horus-name (cf. 108).

In front of the king:

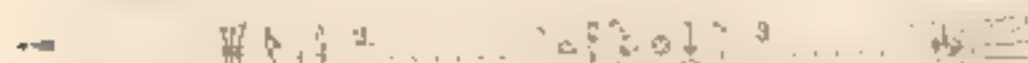
103



"offering a libation to Satis, mistress of Southern Elephantine, that he may be given life"

The  in  should be barrel-shaped. The  in  is on an erasure.

Above Satis:



"Hathor, goddess of Upper and Lower Egypt, Lord of the Southern Elephantine"

Behind Satis:



"as a young daughter during her father's establishment, a shrine for him who formed her, ultimately who caused her to be placed on the Horns of the throne like Ptah for ever"

The various alterations and traces of correction suffice to make it quite clear that not Thothmes I's but Hatshepsut's was originally intended here.

A king W.                           

Behind the king:

106 This refers to the presentation of sacrifices on New Year's Day (see roughly Nov. 1, 28).

In the first row there are 4 cranes, 2 geese and 3 gazelles. Above the last is



"For cranes, geese and gazelles."

In the second row there are 4 cranes, 2 geese, 3 boxes and 3 oxen.

Above the last is



"Young cranes, geese, boxes, oxen, and the water-meadow."

For the water-meadow see *Shang-shu* II, 423, 732, III, 443, and for



Shang-shu, *Shu* II, 443, V, 44, 46.

The pictograph of the water-meadow (see above) must be the marshy ground for the presentation of the sacrificial food.

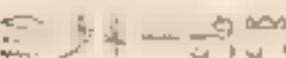
Below this is



"Young cranes, geese."

For the water-meadow see *Shang-shu*, *Shu* II, 443.

Above this is

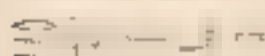


"Young cranes, geese, boxes, oxen, and the water-meadow."

For the water-meadow see *Shang-shu*, *Shu* II, 443.

In the third row there are three bulls with long wide-spreading horns, and three other bulls with horns of the normal shape. Both kinds were used for round their necks with long tassels hanging down to their feet. For similar oxen see M. A. Murray, *Sakuma* (1909), I, 40, 41.

Above the first group of bulls is



"Young steers, bulls, and the firstlings of the water-meadow."

M. A. Murray, *Sakkara Mastabas* I, p. 37 gives *in* as the short-bowed 106 ox; but see Pl. 32 of that work, in the lower right corner for a good representation of an *in*-bull. See also Hengstenberg, *Monatsschrift*, 1874, 10, where he states that *in* is used for the heads of the other cattle (goats, etc.) and gives examples.

Above the second group of bulbs



⁴ "Young people should work on the streets" for anti-drugs.

cf. *impeccability* α^1 = λ *perfectly* $\frac{1}{2}$ *virtuous* β α^2 β α^3

Hatchepout W. \rightarrow holding three staves, dances before Satep. The main part of the queen's figure was cut out, and what was left exposed. Then another block was substituted and Thebanus 29th or 30th replaced Hatchepout. This has fallen out and disappeared. With the original figure, in which there are sub-traces, compare Naville, *Des El Babes*, W. P. 10, fig. 1, Pl. III, 17 b, which shows a scene from Kurnah temple, where the king is represented dancing before Hathor holding symbolic staves and a crook, etc.

የገጽ 111 ላይ ይገኛል፡፡

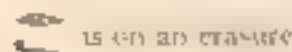


"... ۱۹۴۱ دېږم تر ۱۹۴۲ لېږم پورې د ۱۹۴۱ د ۱۹۴۲

In front of the king



"[Offering] wine to Saka, mistress of Southern Dispensation. That he may be given life."



Behrooz Savis



"... [I] believe him in all his stability and happiness while they must take life for ever."

cf. a similar inscription at 32.

cul 4i is 2nd pers. sing. common gender of the Pol-partic or else 3rd pers. sing. fern.

111 In front of the king:

-- 

" . . . to Neith, mistress of Sais, that he may be given life."

Behind Neith:



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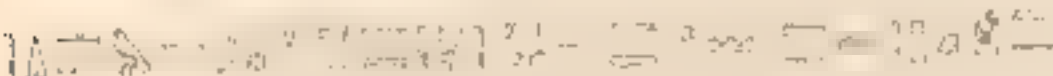
" . . . before me, all health before me, his heart being joyful like Rê for ever."

APPENDIX TO CHAPTER III

FRAGMENTARY INSCRIPTIONS FOUND IN AND NEAR THE TEMPLE OF HATSHEPSUT

Various fragmentary sandstone stelae and small parts of inscriptions were lying about in Hatshepsut's temple left there by the previous excavations. These were of small value, but to ~~decrease~~ the danger of their being stolen, were collected them together and buried them under a section of rubble adjacent the western precinct wall of the temple, ~~between it and the rear wall of the main stone building.~~ The following is a list of the pieces.

A small rectangular stela, showing a man standing , who offers a bowl upon which are three triangular navel cakes. In his right hand he holds the bowl, in his left a Venus flower and two hands. In front of him is the following inscription in five vertical lines: 



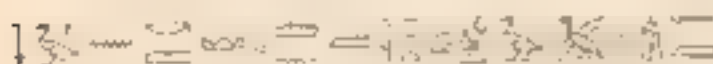
"An offering which the King gives. *Horus, lord of Heliopolis, great god, lord of heaven. By the King's son Anen, Anenno-pet, temple-pet.*"

4. 

"begotten of the goddess Hathor who hath given life to I-Hor."

The only viceroy of Kush of this name so far as we know was the Anenno-pet who held office in the reigns of Sery I and Ramses II (cf. Breasted, *Ancient Records*, III, p. 89, 1936-7).

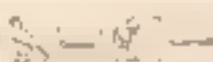
The name of Anenno-pet's father as given elsewhere is different, see L., D., 1760.




INSCRIPTIONS FOUND NEAR THE TEMPLE OF HATSHETSUT 79

A fragment of an inscription. The sculpture is of cream and in the style of 5 the New Empire. It shows the upper part of a kneeling figure, whose hands are raised in adoration.

Above his head is the end of a vertical line of inscription:

...  (For the sake of) Herakhty triumphant.

A fragment showing the feet of a kneeling deity. Below this are the signs: 6

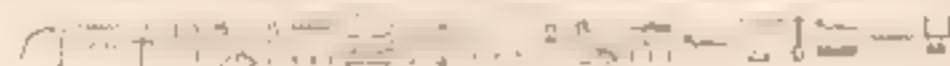
...  ...

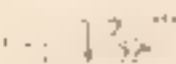
"... Septim, beloved of Horus, lord of heaven."

In the buildings adjoining Hatshepsut's temple, on the south and west (p. 104) were found several fragments of New Empire inscriptions. The numbers in brackets are the number under which they are catalogued in the University Museum.

A statue of very coarse work and of a rather poor type. Two figures, seated one on 7 either side of an offering table and facing one another. Each holds a lotus flower in one hand and a rasher of fat in the other. There are traces of an attendant standing behind the figure on the right but figure is broken.

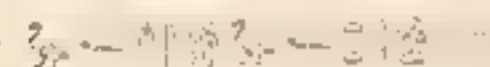
Above the heads are part of the last two lines of a horizontal inscription:

...  ...

...  ...

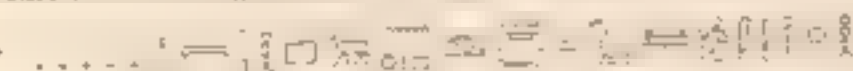
"... pure, on which the god lives, that much heaven gives ... of all his good provisions for the ka of the deceased and when he lives."

Above the table and the lotus flower in the hands of the figure on the left:

...  ... His son Mes. His son Ten."

Opposite the face of the figure on the right: 

A fragment with a vertical line of inscription, to the immediate right of which 8 is a man dressed in the full dress of the later New Empire fashion. He appears to be offering flowers. The same deity as in scene 1.

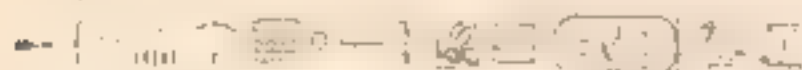
...  ...

"... Superintendent of the concubines. He is not triumphant eternally."

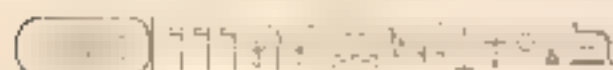
For the title cf. 10 S. 10000, and for the name see Ludwig, *Vormerkstbuch*, Suppl. 2114.

INSCRIPTIONS FOUND NEAR THE TEMPLE OF HATSHEPSUT 81

A stela, with round top, bearing the following inscription of Amenhotep 3rd 13 (10995):



"Year 3, month 1, third season of the king of Upper and Lower Egypt, Lord of the Two Lands, Nebmaatra, the son of Nebmaatra-hor."

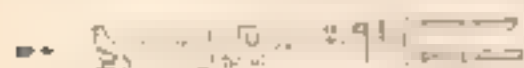


"[Amenhotep has now (ceased)] to be of the gods of Waset given life like Re for ever."

A stela, with round top, showing scenes in two registers.

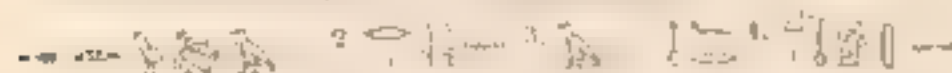
14

In the upper register, a man with upturned khatel adorned Horus, Lord of Buhen, who is seated. In front of the god is a stand with offerings and above him, in two vertical lines, the inscription:



"Horus, Lord of Buhen, great god, Lord of justice, Lord of truth."

Above the worshipper, in four vertical lines:



"The cartouches* Neferneferu."

Lower register. A tray supported on two tall pottery (?) stands. Upon the tray are cakes of bread, a goddess head and a bunch of meat. To the right of these are two women ; the foremost of whom holds a man's urine and the hindmost a bouquet.

In front of the first woman is followed, in a vertical line, by:



"The lady of the house, the singer Taweret."

*For the interpretation of this word (y-n-n) are indebted to Dr. Koeder of Berlin, who quotes Borchardt, *Ägypten und Assyrien*, II, 38, No. 1162.

CHAPTER IV

THE NORTHERN TEMPLE

The northern temple, which lies thirty-six metres north of Hatshepsut's, was visited by Champollion, who has left an account of it in his *Nouvelles descriptions* (Vol. I, pp. 29-38). In the sanctuary he found part of a large historical stela, of which more than sixty years later Captain H. G. Lyons recovered another large fragment (see below, p. 95). The stela was set up, as its inscription records, by a certain Mentuhotep, a general of Sesostris I*, and on the evidence of this and some other stelae of the same date found by Captain Lyons (see below, pp. 95, 96), the building of the temple has generally been ascribed by historians to that king. The conclusion however was premature, for until we found them in 1910 no one had ever seen the Middle Empire walls, they had seen the floor of the building which Champollion studied and Captain Lyons cleared, that floor itself and all the constructions upon it being entirely of New Empire date.

The Northern Temple, Promontory, Ascribed to the Middle Empire

We will first describe the temple as it was left by Captain Lyons and as visitors may have seen it at any time when it was not filled up by the storm-driven sand. Its poverty and insignificance in comparison with Hatshepsut's splendid buildings are remarkable. It is merely a parallelogram of brick divided into courts and rooms by heavy brick walls, the only stones being the small oblong pillars of the little forecourt. The general appearance when we had cleared out the sand which had accumulated in the last few years may be judged from the two photographs in Pl. 29. The brick wall surrounding it was preserved to a height of 1.40 m. from the floor, but the partitions between the courts had crumbled down in places almost to their lowest course. Captain Lyons describes as follows the strata through which he passed in the process of excavating: "At first I dug out blown sand, 1 m. below this, at not quite a constant level, I found a layer of the finest mud silt, supercracked, rainpelted and having on the surface numbers of carbonized fragments of glass, etc. Under this was fine shelled sand for 1 to 2 feet. Below this was a mass of broken, crumbled mud-brick in which the stelae were all found."^{*} He suggests that the crumbled mud-brick may be the remains of a vaulted roof which had collapsed, and that the silt was the deposit left by an unusually high

General Appearance of the Temple

*Letter from Capt. H. G. Lyons, published in *Besseyenne* (year 1902, Nos. 50-60).

The
Original
Roofing
System.

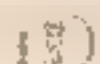


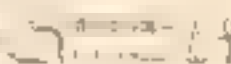
Nile which broke into the temple at some time after it had been ruined. The theory of a mud roof over each of the inner courts, but not of course over the forecourt, is certainly attractive. Unusual as it may appear for an Egyptian temple, it is quite characteristic of Nubian buildings at all dates, and as in this case there are no sufficient supports for stone blocks the only two alternatives are brick vaults or wooden beams.

Ornamentation.

But it must not be supposed that the temple was always as plain and undecorated as it now appears, for the remains that have been found show that it was once covered with plaster and inlaid with bright paintings, while stone doorways carved with figures and inscriptions divided the courts, and the numerous niches were adorned with votive-stelae.

Inscriptions
found in
niches in
the fore-
court.

The stone panels of the entrance door bear each the following short inscription in vertical lines: —


...   — 2.  — 

" *khépru, he made it as his monument for* *khépru, possessor*
of food, that he may be given life. "

The cartouches are too much damaged to give the name of the king with certainty, the only legible part on the north cartouche "khépru," which might represent either Ankhemsuê or Merkhemsuê*. Fortunately on a pillar (No. 10 in plan) of the east side of the forecourt which we found buried beneath the sand is preserved the full name of Ankhemsuê (see Pl. 44), which makes it certain that the founder of the temple was indeed king, and was Ankhemsuê†.

The
Forecourt.

The forecourt is a square, bounded three sides of which are oblong stone pillars that may possibly have supported a superstructure, or at least were so placed to form the sand-covered colonnade. The colonnade was not continued on the east, where the main door stood, flanked on either side by a smaller pylon-style. There are three pillars on the northern and southern sides, and four on the western. Outside there is an extra pillar at the northern and southern ends of the western row. That Champollion's sketch plan shows a double row of pillars on the north and south making fourteen in all, must be due to some error of copying, for there are no traces of any such feature. But the two eastern pillars on the northern row had fallen down and we found one of them, as has already been mentioned, buried below the sand. On one side it is carved with the head of Hathor (see Pl. 34).

*On both the north and the south cartouches the sign  which in the second line appears to be an ankh-sign.

Integrations
and
restorations of
hieroglyphs

Below No. 6 is an *ex voto* of a viceroy of Nubia in the reign of Rameses 12th.

The viceroy stands — E, his right hand raised in prayer, his left holding a fan. His name was perhaps Paymehsi (see Breasted, *Records*, IV, 44 397).

In front of him are the cartouches of Rameses 12th:



"Men-mut-et-sep-en-Ptah, Rameses-khi en-nubt Merer-Amun-mer-heg-Anu,"
beneath which are two vertical lines of inscription.

— — — — — 2 illegible.

"... the *ks* of the hereditary noble, the prince, the steward of Amun-et, King's
son of Kush, overseer of the granary

See also
the plan
of the wall
of the temple

On the east side of the court where there are two pillars, almost the whole space is occupied by two deep niches in the back wall, one on either side of the door. Champollion (*loc. cit.*) states that he found the stela of Rameses 12th, now in the Louvre (*loc. cit.* 101) "entre le mur de l'apophis et le massif gauche du pylon," so that its exact position must have been in the southern niche marked "SK" on our plan. It is reasonable therefore to conjecture that the British Museum stela (B. M. Cat. 1891), which is a duplicate of that set up for Rameses 12th, stood in the corresponding niche "SS" on the north. (For the cartouches see below, p. 96.)

In the southwest corner of the forecourt behind pillar 3 should be noted the steps leading into the present chamber, here is the temple.


Partially
restored
in the
temple

In the next court, between 1, on our plan, some stone paving belonging to the floor of Amenhotep 2nd temple seemed to be well preserved. Having already obtained from the surrounding buildings evidence that earlier structures had once existed below, we took up this pavement and found that the stones had actually belonged to a temple built by a king earlier than Amenhotep 2nd. This was Aahmes 1st, for the stone pavement proved to be simply a 4-5-6 inscribed with his

name, which had been flung free downwards from the place in the passage between E and D where it had originally stood. The door-plate, which is now in the University Museum, is made of *basalt* and measures 1.20 m. X 1.20 m. (10987).

The inscriptions, although executed in *rule* style, are of great historical interest. On the architrave are three scenes. In the first Aahmes stands before Horus of Buhen represented in the form of a sacred hawk on a pedestal; behind him is his mother, queen Aah-hotep, with her arm round his neck.

Above the king is written:

→  "Good god Nechphres!"

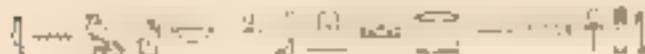
Behind the king, above Aah-hotep's arm:

→  "Adoring the god; four times."


Behind the king:

→  "All protection is behind him! Given life for ever."

Above the Horus-hawk:

→  "Sakh Horus, lord of Buhen: 'I give thee life, stability and happiness'."

Behind the queen, in a vertical line:

→  "King's wife, king's mother, lady of the house, given life for ever."

Scene 2. The second scene shows Aahmes before Mer.

Above Aahmes is: →  "Good god, Nechphres!"

In front of Aahmes is: →  "Adoring the god; four times."

Above Mer is: →  "Adoring the god; four times."

The rest of the inscription, which was in a vertical line, has been cut out.

and the fact that the well-known coronation decree of Thutmose Ist is addressed to a viceroy whose name is expressly given as Thure. Our discovery of an inscription which shows the chief officer of Bahari under Aahmes to have been Thure confirms Prof. Breasted's identification of the author of the Sennebi inscription, and adds an important link to the chain in the history of the government of Nubia.

The biography at Sennebi (see Lepsius, *Denkmäler*, III, 47) states that Thure lived under five successive kings: Aahmes, who made him an "overseer," Amenhotep Ist, who employed him as workman at Karnak, Thutmose Ist, who appointed him "King's son of Kush," Thutmose 2nd, and Thutmose 3rd. He set up two other inscriptions, one on the island of Sehel and one at Elephantine, resuming the return of Thutmose Ist from his Nubian campaign (Breasted, *Records*, II, § 74). The coronation decree of Thutmose Ist which was addressed to him, is known from two duplicates. One of these was originally set up at Bahari, and the other, which has been for many years in the Clarendon Museum, was actually found at Haffa.

The Kufian tablet now in Berlin is a duplicate of the Haffa copy. The Haffa copy has been published by Lissen and translated by Breasted in his *Ancient Records*, II, § 551. The document is a royal decree appointing the viceroy or the king's accession and fixing the toll-takey and the taxes to be used in offering of oblations and taking the oath. Thure is charged to "ascend ships to the pools of Elephantine, and Breasted suggests with much probability that the chief seat of his government was in that city. The office of viceroy, "Governor of the south countries, King's Son of Kush" was created by Thutmose Ist and Thure, its first holder, must in the course of his long life have played a very important part in the colonial development of the growing empire.

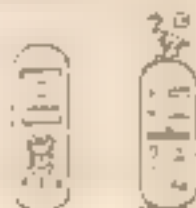
The discovery of this doorway of Aahmes, used as a sanctuary in the temple of Amenhotep 2nd, shows that there were several rebuildings, even of the New Empire temple. Aahmes, as the first king of the XVIIIth Dynasty, no doubt laid down the main lines of the building as we now see it, for the door was lying in situ and evidently fitted between the brick partition walls dividing B from D. The XIXth Dynasty stelae, found by Champollion and by Lyautey, were in the sanctuary which we have lettered B, but also in the part of it which we have seen to belong to the XVIIIth Dynasty. It is therefore evident that they were taken from an older building and placed here by the later generation. The stela of Mentuhotep, general of Senusert Ist, apparently stood against the west wall of the sanctuary, and those of Anket Amen against the northern and southern walls of the same room (Lyautey, *Revue Archéologique*, 1907). Below the level at which they had stood, and under a hard mud floor which had not been touched by previous excavators,

The Gates
of Thure,
found
January 1,
1906

Fig. 1 of
Sennebi
at Elephantine
found
January 1,
1906

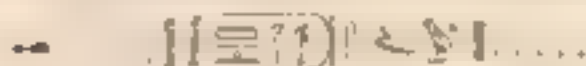
Fragment 275.
Inscriptions
of the same
Amenhotep
274

but is at the level of the forecourt with its pillars of Amenhotep 2nd, we found fragments of the frescoed plaster which once decorated the walls of the sanctuary. They bear cartouches of Amenhotep 2nd, viz.



Aakhepruré, son of Ré, Amenhotep heg-Anu.

and on a stone block in room A was a fragment of the same king's cartouche, viz:



[Amenhotep heg-Anu]

while a fragment of stone thrown out of the temple by previous excavators bears his name *[Amenhotep]*.

State of the
temple
before
excavation

Other pieces of the plaster show remains of hieroglyphs and scraps of decoration, all well drawn and colored. Under the same previously untouched floor we found in room C a stela of white limestone much damaged and difficult to read. It contains the fragment of a biography of one Aakhes, who was an officer under either King Aakhes or one of the Thutmosids, according as the damaged cartouche may be interpreted. The text is as follows, in nine horizontal lines:




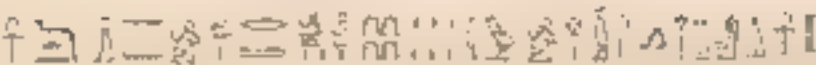
"An offering which the king great *Amun* lord of the Necropolis, *Horus* lord of Buhen, may they grant a funeral feast



"wherein [the god *Amun*] that which comes from the *ethiopian* and the Nile brings
... splendour in heaven, power on earth.




"triumph [in the underworld] He said: I am a valiant warrior of the mighty prince.

6.   Sarc of an
Upper
Egyptian
Akhmet


"(. . . , not . . .) living for ever, I captured 46 head of people while following the prince, given life

7. 

" . . . Horus, lord of Edfu I protected () my citizens, I did not cause to be sent another

8. 

"(. . .) I was a father of the miserable () one whom my brother praised, the Orisia . . .


9. 

"Akhmet, son of the wife

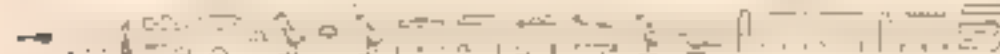
Besides this we found two other stelae, both in the eastern part of the temple. The most interesting is in two fragments, which were lying in the sand of the northern part of the pillared courtyard a little east of pillar 7. They were just below the level of the XVIIIth Dynasty floor, but the fact is of little importance as the floor had evidently been broken through at this point by previous excavations. The stela had been set up by a viceroy of Nubia, in the reign of Amenhotep Ist, and records the subjugation of the regions and the sending of captives and tribute to the king. The material is soft sandstone and the inscription was much damaged and difficult to read. On the first fragment only four horizontal lines remain, and the beginning of each line is absent, the surviving text is as follows:

1. 

" . . . there ever not any rebels in this time they attain to nothingness. The chiefs

2. 


" in they follow. They roaring as do a flame of fire throughout every foreign country.

3. 

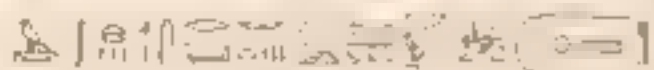
" every foreign country being gathered to one mind that they may () their land daily.

Below the scene is an inscription in seven horizontal lines:

Stela of
Seti Ist


-- 1. 

"Year 1, month 3, third season, last day. Live Horus, the strong bull, making the Two Lands to live, favourite of the two crown-goddesses, Uchemmesut.

-- 2. 

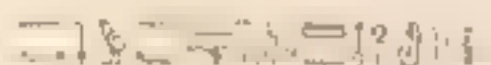
"golden Horus, repeating annulations, mightiest of lords in all lands, king of Upper and Lower Egypt, Menmaatê.

-- 3. 

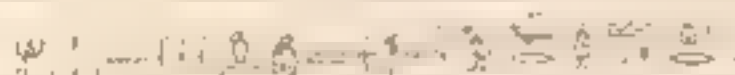
"given life like Rê for ever and ever, beloved of Amun, lord of the Thrones of the Two Lands (horus);  Min-mahê.

-- 4. 

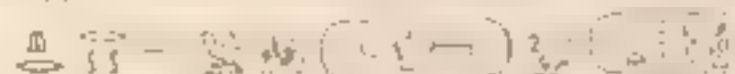
"planted with all his monuments, and on his son whom he loves, makes for him.

-- 5. 

"thou hast it for him (?) Min Amun, beautiful of countenance.

-- 6. 

"millions of years united with health and happiness. The chief of the land of.

-- 7. 

"under the feet of Horus, the king of Upper and Lower Egypt, Menmaatê, son of Rê, Seti-Merneptah.

The following small objects were found in different parts of the temple, all below the level of the XVIIIth Dynasty pavement. The numbers given to them are the numbers by which they are catalogued in the University Museum:

Small
objects
found
below the
floor of the
Temple

- No. 10903 Half of a clay brick-stamp, with the sign ka and the serpent, in room C.
- No. 10905 Two pieces of a blue glaze model box-ring with name of Zoserkarê (Ammerhotep Ist) in room D (Pl. 41).
- No. 10921 Small fragment of dark blue glaze with light blue inlay of several letters or hieroglyphs in room E (Pl. 43).
- No. 10922 Half the head of a stonite statuette.

Small
objects
found
during the
excavation
of the
Temple

- No. 10943. A blue glaze little model of a gourd and several blue glaze beads, in chamber F, just outside room 4.
- No. 10956. A set of four lead blue-glaze beads, in room C.
- No. 10959. A group of glazed steatite with figure of a lion, but no inscription, in room C.
- No. 10960. A little drab jet full of beads (viz. blue glaze and carnelian) in chamber A.

Also five plain and one decorated jet of the same general kind as the pottery found in the priests' chambers (p. 116), and a piece of sheet gold stamped with a plain figure of a hawk in rather archaic style, measuring 4.5 x 3.5 cm. and weighing 6 grammes, which was found in front of the forecourt of the temple and sent to Khartoum.

History
of the
Temple -
and
rebuilding
of the
Temple

From the evidence which has been given in this chapter, it would appear that the northern temple at Buhen in the form in which it was described by Champollion and has been viewed since its excavation by Capt. H. G. Lyons, was built not by Sesostris Ist as usually supposed, but by Aahmes at the beginning of the Eighteenth Dynasty. It was rebuilt on the same general lines by one of his successors, Amenhotep Ist, and very possibly altered in minor details by later kings. To some one of these rebuildings may perhaps be attributed the faulty alignment of the northern walls and of the sides of the sanctuary. The historical stelae, recording the conquests of Sesostris Ist, whose memory was held in great honour were placed in the sanctuary in or after the Eighteenth Dynasty. They were, no doubt, taken from an older temple, but whether that temple stood on the identical spot is uncertain. For though, as we shall have occasion to show in the next chapter, Aahmes razed an earlier building to construct his own, it cannot be considered certain that it was a temple, and it is perfectly possible that the stelae may have come from some other quarter of the town, perhaps even from the Twelfth Dynasty temple over which Hatshepsut afterwards built her own.

The latest inscription of any kind in the temple is the *ex voto* of the reign of Rameses IInd, and unless we are to suppose that the brick screens between the pillars of the forecourt are of Coptic date, there is no evidence of any occupation or use of the building after the close of the Twentieth Dynasty. As no traces of the Romano-Nubian or Coptic periods were found in the dwellings immediately surrounding it, we may perhaps infer that it was allowed to fall into ruin when the Egyptian settlers deserted the town at the close of the Ramessid period.

APPENDIX TO CHAPTER IV

STELAE ALREADY KNOWN FROM THE NORTHERN TEMPLE

The stela of Mentuhotep has been several times published. The first large fragment of it was discovered by Champollion and Rosellini in 1829 and sent to the Egyptian Museum at Florence (Florence Cat. No. 1542). It lay close to the back wall in the sanctuary, lettered B in our plan, but was not built into the wall. In 1893 Capt. H. G. Lyons found a second fragment in exactly the same place and presented it also to the Florence museum. Prof. J. H. Breasted published the two fragments together in "*Proceedings of the Society for Biblical Archaeology*," May, 1901, and has translated the inscription in his *Ancient Records*, Vol. I, p. 510. He describes the stela as follows: "At the top is a relief showing Sesotris Ist standing, facing Montu, lord of Thebes, who says, 'I have brought for thee all countries which are in Nubia beneath thy feet, good god.' Saying these words the god lends and presents to the king a line of land and captives, symbolizing Nubian towns. The head and shoulders of each captive surmount an oval containing the name of the town represented. There were originally ten of these towns, of which four have disappeared."

"Below the relief were two inscriptions, the first belonging to the king, the second to Mentuhotep." Of the king's inscription only fragments of six lines survive. These lines give the royal titles. Mentuhotep's inscription sets forth his own titles and proceeds with some words which evidently refer to a campaign in Nubia, but the details are incomplete. The date is given as year 16 of the king's reign.

Of other inscriptions already known from this temple the most important next to Mentuhotep's are the two stelae of Efe-Antef-djehi discovered by Capt. H. G. Lyons. They were built into the walls of the sanctuary (B in our plan), one on the north and one on the south side, and fragments of them were also found in the passageway of the room marked F in our plan (Lyons in *Bersaniens, loc. cit.*). One of these was presented by Captain Lyons to the British Museum and is mentioned in the official "*Guide to the Egyptian Galleries*" (*Sculpture*, p. 66, No. 1177). The titles of Efe-Antef-djehi are incised in seven horizontal lines

- 2 and describe him as "hereditary prince and leader of the king" etc. At the side in relief is the full royal titulary of Sesotris Ist (Khepseskafst).
- 3 An article by Mr. W. E. Ostrin in "Proceedings of the Society of Biblical Archaeology" (1893) describes two Middle Empire stelae found by Capt. H. G. Lyons in the northern temple in that year and presented by him to the Ashmolean Museum, Oxford. One of these shows a seated winged-disk and a king embracing a deity, probably the local Horus. Between the two figures is a short inscription containing the totemic Sesotris-Sesemutet Ist. The other stela bears a king's name and only a few of the signs upon it are legible, the style resembles that of the Middle Empire.
- 4 In the same article by Mr. Ostrin are described two other stelae of the reign of Thothmes Ist which were found in the entire passage of the northern temple by Captain Lyons and presented to the Ashmolean Museum. One of them appears a pharaoh in relief with a large serpent behind her head, which suggests that he may be the local form of her, referred to above in the description of the scene in Hatsheput's temple of 1901. The other is a boundary stone.
- 5 The stela of Ramesses Ist now in the Louvre (Cat. 59) was found by Champollion in 1829. He describes it in *Notice descriptives* pp. 29-30, as having been built in "centre le temple de l'empereur" (can be destroyed), which no doubt means that it occupied the niche in the south side of the temple. It was published by Champollion in *Mémoires* I, 2, No. 2, and by Roussin in *Mon. Stor.* 45, No. 1), and has been translated by Prof. J. H. Breasted in *Ancient Records*, Vol. III, § 54. The inscription commemorates the first year of Ramesses Ist in the temple, in honour of Amen-Ré, concerning a new offering in increase in the number of priests and servants, and an addition to the temple building. The stela seems to have been set up by Sety II, who was regent with his father.
- 6 A stela of Sety II, now in the Louvre, is not mentioned, was apparently set up by that king only seven months after the fact. It now is in the British Museum (Cat. 1791) and it seems safe to say that it originally occupied the niche on the north side of the temple, standing opposite the Ramesses stela. Like this it records new works done in the temple as to new building. The god who is mentioned is Min-Amon, see Breasted, *Ancient Records*, Vol. III, § 167.
- 7 We may also note in this place two stelae in the British Museum (Cat. 623 and 1788) described in the *Official Guide* (sculpture, 49, 178 and 179). They are 623 "Sepulchral stela of Khonsuwan, an Etrus and Hh prince and governor of the Sudân," and 1788 "Sepulchral stela of Metsetchem, (1) the son of Khnemusmes, the overseer of the gold workers."

CHAPTER V

BUILDINGS ADJOINING THE TWO TEMPLES

The entire area between the two temples and a considerable tract of ground round each of them was occupied by buildings. These had never before been excavated so that it was necessary to remove thousands of tons of sand and to carry it away either to the river bank or onto vacant ground. The photographs in Plate I illustrate this part of the site. Fig. 1 is a view in 1911 (not taken from a little north-west of Amenhotep's temple and shows the east wall of the temple with its eastern end broken and levelled rather roughly. In Fig. 2 the temple is seen as it appeared when the excavation was first started. The interior had then been cleared of the sand which had formed a dune in the last few years and some of the houses to the north had been discovered. At the back of the picture the workmen with the help of ramps were removing sand from the south-western exterior corner of the temple and carrying it northwards, in front they are digging along the upper level of the terrace just inside the south side of the temple and running the rubbish out eastwards to the bank of the Nile.

*Entrance of the
Buildings
Fig. 1, 2, 3, 4
See p. 106*

Over all this part of the ground except that occupied by the houses of the harem (Nos. 4, 5, 6) we had a good view of a terrace varying from three to five metres. The great four-sided wall which enclosed Harshapont's temple on the north was actually five and a half metres in height where it was best preserved, and in some places there was a more of sand on the top of this. Working down to the very foundation of this wall in one part and clearing its length for a distance of 60 metres (an average depth of about four metres below the top see Pl. 3, 4, 5, 6). There was an undisturbed slope of sand from the north wall of Harshapont's temple to the south wall of Amenhotep's when we began work, and except for the vaulted chamber outside the north-west corner of Harshapont's temple which had been left open by Mr. Scott Moncrieff and a low house adjoining it on the west which had been partially revealed by the kheddjeh, there was nothing to show of the top of the bricks of the buttressed wall were visible in places, but the chambers built against it were entirely hidden, nor was there the slightest indication of even the topmost stratum of the houses and courts which grew up over stretching in a continuous series up to and beyond the northern temple.

*The Green
Boundary Wall*

The first part of this large area which we uncovered was the massive brick wall adjoining the north side of Hatshepsut's temple. Its height at the point shown in Pl. 5 is five and a half metres, and an idea of its general character may be obtained from the same illustration. The buttress shown in the photograph is the third from the east in our plan (Pl. 5), and is a quadrilateral, about a metre below the feet of the statue, the picture. The wall forms the northern side of the "inner fortifications" and starts from the corner of the still more massive wall of which the brick pylon is a part of Pl. 5. It runs at right angles to this but askew to the terraces of Hatshepsut's temple for 30 metres beyond it, and then turns to the south for 10 metres. In Plate 50 we see the corner where it again turns outward. The style of the brickwork resembles that found in other Middle Empire tombs, and the bricks are made by alternating rows of stretchers and headers, to which there was originally a facing of more ornamental bricks that have since fallen away. The width of the wall at the base is four and a half metres, and it has a batter of about one in ten. At irregular intervals there are projecting buttresses, which from their frequency must be structural rather than strategic features. In fact they were masked and obliterated by the final stage of building, for after the wall had been completed, a thin screen of bricks was carried across to connect the buttresses and to present a direct, unbroken face to the attacking enemy.

*The system
of walls
underlying
the temple
of
Karnak*

The exact dating of this wall and of those on the east and west with which it continued was for a long time a matter of doubt. The fact that its alignment was so different from that of the temple suggested immediately that it did not belong to the same period, but whether it was earlier or later could not be determined at the first stages of the digging. It was not until we had excavated the northern temple and the whole surrounding ground that conclusive evidence was obtained. We then found that below the building covered by Vahnes and below all the contemporary houses surrounding it, there was an entire system of walls which had been levelled and then covered over to form a platform for the XVIIIth Dynasty buildings. These walls which are massive and well built form rectangles of which the sides are exactly parallel with one another but askew to the lines of both temples. They comprise an unintermitted and homogeneous series of which the wall with which we are now dealing is a part. This series, moreover, does not stop at this point but is continued southward through and beyond Hatshepsut's temple, at the northeastern and southwestern corners of which parts of it can be seen though intersected and destroyed by the boundary wall of the temple. Even further on in the maze of superimposed houses which line the southern side of Hatshepsut's temple the same original system could be traced.

On the north of the buttressed wall the foundation level of these underlying buildings is a metre and a half below the pavement of Amenhotep's temple. On the south of the wall the XVIIIth Dynasty level is constantly higher than on the north of it, the door of Hatshepsut's temple being almost a metre above that of Amenhotep's; but the underlying buildings go down to the same depth on the south as on the north and the foundations of the buttressed wall itself are actually 0.40 m. lower than any other (see Plan D).

*The System
of Walls
underlying
the Temple
of Amenhotep.*

So it is evident that the buttressed wall and the eastern and western walls, which with it form what we have called the inner fortifications, are the oldest of any on the site. And since we have seen that they must antedate the first king of the XVIIIth Dynasty and we know that the town was built in the XIIth Dynasty, there need be no hesitation in ascribing the inner fortifications and the whole series of the lowest buildings to the Middle Kingdom. It will now be understood how it is that the temple of Hatshepsut since the completion of our digging stands on a high platform far above any other building on the site. For it is erected on a substructure composed of the ruins of a XIIth Dynasty temple, built we cannot say with certainty by what king but very possibly by Sesotris Ist. This temple was placed, as temples often were, at the very corner of the fortified town, and the only problem is to explain why any buildings stood north of the inner fortifications and outside them. The outer fortifications which begin 100 metres to the north of the old town wall were certainly not made until the XVIIIth Dynasty (see below, p. 119), and we have found no traces of an exterior line of XIIth Dynasty intrenchments. Yet it is almost impossible to suppose that while one temple was sheltered within strong defences another would be left wholly unprotected. So that we have been led to doubt whether the Middle Kingdom buildings under and around the northern XVIIIth Dynasty temple were actually a temple and were not rather some sort of castle or fortified governor's house. If that should be the case the history of the growth of the town would be clear. We must suppose that Aahmes, when he resumed the effective government of these southern regions which had nearly shaken off the Egyptian yoke during the XIIIth to XVIIth Dynasties, re-founded or at least enlarged the important military colony of Buhen. He made a wall and moat at some distance from the inner fortifications, which not only encircled them but included a previously unprotected area to the north. Then in the space thus rendered available he built a new temple outside the original fortifications which now formed only an inner citadel, razing and levelling for this purpose the already half ruined walls of the castle or governor's house. In this new temple he placed

*Not
Empire
fortified
house*

New
Empire
Temple

the venerated stone set into a wall as we should suppose in the southern temple by the *officers of the temple* (I) and it became the nucleus of a settlement of temple officials who built their houses between it and the open street which now runs along the north of the old town wall. Three generations later Hatshepsut, and others of erecting a striking monument close the highest and most compact point on the whole site, which offered the additional advantage of a quay and quay already existing.

House
Temple
Hatshepsut
Temple and
the old
City Wall

In the days of Hatshepsut the Middle Empire town wall was no longer independent for purposes of defence, but its principal existence, store-houses and houses had been put in the space between it and the temple and this had it continued. The buildings, as can be seen from the plan (Plan D), form a complicated network without any arrangement and belong to every date from the XIIth Dynasty onwards. The characters are of all shapes and sizes, built haphazard each as it might be required for the purposes of the household. There may be seen the remains of benches and benches of various ways leading from one room into another, across the temple and across places a well marked staircase which runs from the lowest level up to the top of the wall. In several places the original Middle Empire partitions are detected plainly recognizable by the character of their masonry work and by their alignment. Above these are numerous rooms contemporary with the last known Hatshepsut's temple though often, as might well be the case with more recent ones, below the level of the temple pavement. Next just above the temple pavement are rooms belonging to the latest XVIIIth Dynasty and to the XIXth and probably XXth Dynasties, and over these a series of Roman-Nubian and Coptic houses. In our plan the XIIth Dynasty walls are shown by the solid line, the early XVIIIth by thick and the late XVIIIth and XIXth by hatching. At the northeast corner above the Egyptian houses and storehouses were one or two dwellings of Roman-Nubian date. Two definite examples, vouched for by the evidence of pottery standing still in position, were just below the Coptic level at the points marked with white crosses on the plan (grids iv F 3). To this sporadic occupation must be attributed the sherds of Roman-Nubian pottery, two strikingly marked with several letters in Meroitic writing on stone found close to the surface at this spot. At about the same level as the Roman-Nubian, and not always easy to distinguish from it, were a few small Coptic houses extending along the top of the wall from the 2nd bottom to the 5th and overlapping the ancient Egyptian street to the north. It was necessary to cut away the floor (which was all that remained) of several of these in order to clear the face of the

buttressed wall, but the line of the floor and the walls of the better preserved houses can be seen in the photograph (Pl. 4x). Thus all the brickwork above the level marked 'C-C' in that place is Coptic. And the line drawn against the buttress (buttress No. 3) is continued in Pl. 4x as buttress No. 1. In these houses we found a little pottery, which was sufficient to prove their late date, independently of the evidence of the surrounding levels. The present wall of the temple is pierced in several places by doorways leading into it from the Coptic tower, one of which is plainly visible in Pl. 4; at the east of the two points marked with a white cross. The modern wall which protects the temple has been carried over there, but can easily be distinguished even in the photograph.

The most interesting of the chambers between the temple and the old city wall is that at the southwest corner which is marked in our plan with an asterisk. It is not entered by any resemblance to a doorway or single passage, which requires careful inspection of the junction of the walls to reveal the nature of the three Egyptian periods on the site. This chamber, therefore, was built at some time between the end of the XVIIIth and the end of the XXth Dynasties. It was reached with a barrel vault in the Nubian fashion, and a short underground passage originally led into it from the temple. It was in this chamber that Mr. P. Saut-Moret discovered amongst the statues of Sobekneferu and several others which are now in the *Musée du Louvre*.^{*}

It is significant that our own discovery of statues was made not far from this point, namely, in the ancient street opposite the south houses of the town wall and on a level which belongs to the late part of the XVIIIth and XXth Dynasties. It is possible that the statues and statue originally stood in the temple and were removed in time of some peril, when the town was finally deserted by the Egyptians or rather earlier. The wall of the inner city continues westward, as has been stated, a point or more beyond the temple and then turns to the south. Inside along its whole length are built houses of which we have only excavated a few immediately west of the temple which are shown on our plan. They are of the same general character as those which have just been described and the upper levels are entirely of New Empire date, though it may safely be assumed that the ruins of the Middle Empire town lie below them. They had been gradually sinking away by subsidence and yielded no antiquities except clay sealings, but in one of them were buried several skeletons of hippopotami.

^{*}See a note by Mr. P. Saut-Moret in "Proceedings of the Society of Biblical Archaeology," March, 1906.

2. *Lower*
3. *Upper*
4. *Temple and*
5. *City Wall*

6. *Statues and*
7. *Statue*
8. *Statue of Sobekneferu*
9. *Statue of Sobekneferu*

*Buildings
discovered
during the
excavation
of the
Temple on
South*

On the south side of the temple under the debris which had been thrown out from the interior we found a maze of small dwellings which we dug down to the lowest level. It was impossible to make a plan of the countless intersecting walls of jerry-built houses raised haphazard each on the ruins of the last, but we ascertained that exactly the same plan as were represented here as on the north side. At the bottom were the original XIXth Dynasty walls cut to pieces by later builders, then numerous chambers which being below the level of the temple-pavement may safely be dated as not later than XVIIIth Dynasty and above these again rooms in which were found so many fragments of Romano-Nubian ware as to prove an occupation at that date. But again, however, there was no trace at this point. A few large stony sculptures, some of which may have been thrown out from the temple, were found among the rubbish and have been dealt with in the Appendix to Chapter III, pp. 40-513.

*The
city wall
found
during the
excavation
of the
Temple*

Having described the inner citadel which was the original Middle Empire town, and the later buildings erected within it, we have next to give an account of those which extended on the north side, not up to and beyond the temple of Aahmes and Amenhotep 2nd. The earliest of these have already been referred to and conjecturally named 'The Governor's House'. They form a large heterogeneous block, enclosed by a massive wall which is 15 to 20 metres distant from the inner citadel and extends to the northern side of Amenhotep's temple, but includes a much greater area than the temple itself to north, east, and to west. Only the lower courses of the walls are preserved, standing to a height varying from half a metre on the west to a metre and a half on the east, at which level they had been uniformly raised to form a platform whereon later buildings were erected. The spaces which were originally rooms had been filled with stone chippings and debris so as to make a solid support for the floor, and as this was done in the actual process of making the secondary building the few objects found in this filling could not be used for dating the primary walls.

But a comparative study of the floor levels will leave little doubt as to the date of the 'Governor's House'. The argument, which is corroborated by the evidence of the levels in the inner citadel, rests mainly on the position of the walls in relation to the temple built by Aahmes. We have already stated that the door of Aahmes had merely been hung face downward from the place which it originally occupied between courts E and D; so that it must have stood on a floor of virtually the same level as Amenhotep 2nd, which is exactly fixed by the bases of the pillars in the forecourt. This is the floor as it was seen by Champollion and left by Capt. H. G. Lyons. It was when we took up

the pavement of stone and mud belonging to this level that we found the heavy walls of the "Governor's House" underlying it and running diagonally across the axis of the temple. So that the "Governor's House" being actually beneath the building erected by Amenhotep must necessarily be earlier than it. The only possible alternative would be that the "Governor's House" itself had been erected by Amenhotep and that Amenhotep when rebuilding the temple of his predecessor took the doorway and set it up in his own. But this is intrinsically most improbable. For while it would be a natural act of piety to set up the historical statue of remote deified ancestors like Senusert in a particular niche, it would be quite unlike any Egyptian king to take an integral part of an older building such as a door and set it up anew in front of his own sanctuary without even altering its inscription. Again, the entire character of the underlying walls is unlike that of a temple; the arrangement of their doors no longer follows coherent temple scheme; the style and weight of the brickwork are different from that of the temple above; the area included is much greater; and the concentration of the decoration is wholly divergent system. Finally the scheme of alignment, while contradictory to that of the buildings known to have been erected by the XVIIIth Dynasty monarchs, Amenhotep 2nd, Thutmose 3rd, and Thutmose 4th, is in perfect agreement with the scheme of the inner citadel. And the inner citadel even apart from the evidence of levels would be regarded as Middle Empire, both from the style of its construction and from its position in relation to the Middle Empire cemetery. We may therefore unhesitatingly reject the hypothesis that the "Governor's House" was built by Amenhotep and if not erected by him it must have been built earlier than the XVIIIth Dynasty. It is undeniable on historical grounds that such a work would have been undertaken in the troublous times of the XIIIth to XVIIth Dynasties, while we know from the documentary evidence of the stelae that a town existed here in the reign of Senusert 1st. There can therefore be no doubt that the "Governor's House" no less than the inner citadel dates from the XIIIth Dynasty. Any reader who will study Plan D can see at a glance that the lowest walls compose a single uniform system extending over the whole site and obviously all constructed at the same time. The XVIIIth Dynasty builders utilized them only as convenient platforms and set out their own temples obliquely to them on a more easterly plan of frontage.

The foundations of the "Governor's House" go down to a depth varying from half a metre on the west side to a metre and a half on the east side below the floor of the northern temple, as marked by the bases of the pillars in the

*Plan of the
Governor's
House at
Thebes
1896-1915*

The
"Governor's
House" L.

forecourt.* This is not quite as deep as the foundation of the buttressed wall of the inner citadel which goes down 20 centimetres deeper. The difference may be explained either by supposing that the citadel wall being so very massive and heavy was stepped 20 centimetres below the surrounding soil, or by supposing that it was built on the surface of the ground and a short interval elapsed before the "Governor's House" was added on the north side of it. No great length of time would be needed to accumulate that depth of sand against a northern wall, the storms of a single winter would be sufficient, as we know from experience. The brick screen which was added along the front to obliterate the battlements and make a sheer face, began at the level of 20 centimetres above the foot of the wall, that is to say at the same level as all the other buildings shown on the plan in Plate

The Inner
Staircase
Buildings
above it
M, N.

The "Governor's House" as it has just been described, was only recovered piece by piece after very tedious digging for it lay buried beneath two layers of later houses. Some of these comprise the series running from N. 10 to 20 on the southern end of Avenue 10, but the wall was cut away down to the lowest level in order that the Middle Terrace walls might be studied without impediment. The remainder, viz. Nos. 1 to 9, were left to lie with their walls intact and only so much of the floor cut away as was necessary to recover the plan. The best idea of this part of the site may be obtained from the photograph in Pl. 10, which shows the houses at all the different points viewed from the northward from the inner citadel in Pl. 10. The next picture (Pl. 11) shows several of the screen buildings on a larger scale and marked with letters to explain the dating of the various levels. The lowest of the walls of the "Governor's House" marked with the letter L, (see in Pl. 10) above these, marked with M, are houses the floors of which are contemporary with the floor of the temple (black in plan), while a third level, 1.25 metres higher than the floor of the temple, is lettered N (shown in plan). The N-level is dated by two inscribed objects, namely, a *menche* worn *sema* with the name of Ankhnesneferibre (20th) found in room 19 and a *was* fragment (name of Hekmaatsekhemes 4th) found in room 17†. So that the highest floor belongs to the late XVIIIth, the XIXth and XXth Dynasties.

*The difference in height is due to the natural rise of the ground in this part. It slopes upward from east to west and the foundations of the screen buildings were built direct on the ground and followed its slope. The floor of the temple however was laid over them was made almost truly horizontal.

†Also at a level corresponding to M above room 1 was found the base of a blue glazing of Tut-ankh-amen.

The M level is dated to the XVIIIth Dynasty by the fact that its floor is generally continuous with that of the temple and consequently is supplied by the finding of a blue glaze ring-headed *Sphinx* (not *ré Aménhotep III*) in the filling of room 12, and of a well-preserved statue of the same king in the filling that supported the floor of room 7. The L level we have already discussed (p. 120).

These three strata of building are classified according to the relations which they stand to the floor of the temple as defined by the bases of the pillars in the *hatshoput*. Thus L stands for the system of walls lying on the temple floor, M for walls built immediately on the top of L and consequently above the temple floor, also for all those built on the top of the L walls but at a height of less than 1.22 metres above the temple floor. N for walls built over those, which is clearly defined by a row of doors connecting the rooms numbered 1-11. The two lower strata occur over the whole of the part of the ground as far as the north wall of the temple, but the third is not found west of room 4 or south of the southern wall of the temple. In the rooms 1-11 only the second stratum is represented.

The houses and rooms numbered 1-11 are of great interest, for they form one of the most complete series of buildings yet discovered in connection with a temple. From them it can be seen how the people of this time lived in relation to the very precinct wall and constantly returned to it. The level was always being raised by the accumulating rubbish of successive generations. Thus a very few generations after it had been built the temple might have stood in a sort of pit several feet below the surrounding houses.

The rooms 1-11, which adjoin the southern wall may be distinguished into two parts, namely, rooms 1-7 which are open to the sky, and, respectively, constructed and entirely of the M period, with one or two above them simply because they never reached relationship and rooms 8-11, which the construction is poor and there are several stages of rebuilding. The first part divides in much the same way by a door leading from the temple into room 1. The door is in a low screen wall 2.40 m. high, built here not to serve as a step when the door for the poor people had risen so much as to leave the temple as to make a step necessary. Originally, as the stone threshold beneath it shows, the poor entering walked through on the level surface. Turning to the right, westwards, returning from the temple he passed hence to rooms 1-11, in turn, by the doorways connecting them. In these three rooms there are traces of whitewash and whitewash on the interior and they were probably visited with brick like the chamber outside the northwest corner of *hatshoput*'s temple in which the statue of *Schochemshek* was discovered. Their walls stand to a height of 2.0 m. above the temple floor and were never

Houses
1-11, of the
XVIIIth Dynasty
L, M, N

Houses
1-11, of the
XVIIIth Dynasty
L, M, N
1-11, of the
XVIIIth Dynasty

Houses
1-11
on the north
of the
Northern
Temple.

rebuilt. The floors, however, were raised in the process of occupation; for though the original level of the doors connecting 1 and 2 was flush with the temple floor, as can be seen by its jambs, yet a new threshold was afterwards inserted 0.80 metre higher. The original floor in all three was of mud beaten hard over the stone chips used to fill up the Middle Empire rooms. Over this there accumulated in the course of not many years a skin of mudash, which was beaten hard to form a new floor and the thresholds of the doors were then lifted and put up to that height. The stratum *c* evidently served a useful purpose for the inmates of the rooms, who like the modern Nubians had the custom of burying pots beneath the floor, with the mouth just flush with the surface, to serve as receptacles and receptacles. Against the stone threshold of the doorway connecting room 5 with room 2 there were four pots buried in this way, and further on in rooms 6 and 11 there were considerable numbers. These will be described in a section of the next chapter.

In room 4, though the side walls are actually no higher than those of rooms 1-3, several rebuildings can be distinguished. The doorway and steps leading in from the temple have already been mentioned. On the lowest floor of the room, identical with the temple floor, is a rectangular brick hearth, buried just beneath the N floor is a large jar, and on a floor higher than the N floor (the only instance of so high a level) is a second rectangular hearth. Similarly in room 5 the several successive periods of occupation have left their traces. At the very bottom are well preserved remains of the Middle Empire soil structures filled in and levelled. Immediately above these are two circular clay corn bins like those in modern Nubian houses. Above them in the western wall is the door which connected with room 4 during the next stage, and finally this door has been walled up and another made beside it to serve the next level, which is that of the N period.

In rooms 9-11, all the principal periods can again be studied. In room 12 the dwellers on the N floor used no less than fourteen large jars. In room 12 there is the base of a column lying at the Middle Empire level. In rooms 5, 6, 8 there are no traces of construction of the M or temple period; they have only an N level. In 5 was the small stone stela (see p. 115) lying face downwards on the brick lattices built against the west wall. In 6 were six large jars below the floor, lying beside which under the floor were a few XVIIIth Dynasty heads and small unscrubbed scarabs.

The rooms of the N stratum east of these were raised down to one or two courses of brickwork, but their floor level was continuous with that of 5, 6, 8. The walls of the M stratum below these almost follow the older alignment of the L building beneath, an exception to the otherwise universal rule on the site

Apart from the stela, clay walling and pottery, all of which will be treated in the next chapter, no objects of importance were found in these houses south of the northern temple. We have already mentioned (p. 114) the two scarabs and ring-bezel of Amenhotep 3rd, the ring-bezel of Tutankhamen and the clay finger ring of Ramesses 4th. Besides these were found the following small objects:

Objects
Found on
the House
south of the
Northern
Temple.

In the lowest stratum I, which was originally Middle Empire, but filled in during the XVIIIth Dynasty: Three broken little blue glaze figures of Isis, two or three blue glaze beads, three bronze-style, a poor ornamental scarab and a stoneware scarab. All might well be of the XVIIIth Dynasty, and it is actually more probable that objects found even in this lowest level would belong to the XVIIIth Dynasty, the time when the Middle Empire walls were razed and levelled.

In the M stratum, which is definitely XVIIIth Dynasty, there were fragments of blue fayence dishes, of little blue glaze figures of Isis, a few beads, amulets and pendants of blue glaze, a bronze chisel and fragments of other bronze implements and an ivory hair pin. Also a clay model of a boat with its crew.

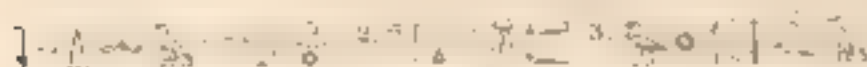
In the N stratum, which is XVIIIth to XXth Dynasty inclusive, room 4 contained fragments of fayence and a flint sickle. In room 6 were found a complete necklace of small carnelian and blue glaze beads, scarabs and pendants, and a fragment of bronze. In 7-9-10 8, blue glaze beads and fragments of a blue glaze ring and of fayence. In room 11, a gaming die. In room 18 little blue glaze figures of Isis and some blue glaze beads.

The houses 11-66 on the north side of the temple all belong to a single period, viz., the XVIIIth Dynasty, without any traces either of an L stratum below or of an N stratum above them. There are several floor levels and many indications of rebuilding and alteration in walls and doorways, but the entire length of time, during which this part of the site was inhabited, must have been comparatively short. For the floors are all included within the lower half of the M stratum, that is to say, within the 62 centimetres immediately above the level of the temple forecourt. In general character the dwellings are very similar to Nos. 1-20, which have already been described, but the class of inhabitant was superior if we may judge from the comparative space-ness of the rooms. The most interesting and complete of these are illustrated on Plate 13. Green, clay bins and rough domestic pottery occurred in many parts, but apart from the painted jars found in room 52 the only object of real value was the stela of the scribe Amenhotep, which had been taken from its original place and cut to serve as the base of a column in room 48. This stela and the pottery are described in the next chapter.

Houses
11-66 on
the north
side of the
Northern
Temple.

kilt on which he carried an iron sword, a bow, arrows, and a rifle and he prayed to
Horns of Baboon. Written in a large hand in the manuscript is as follows: ♦♦

$\gamma_{\alpha} = \gamma_{\alpha}^{\text{max}} - 1$
 $\gamma_{\alpha} = \gamma_{\alpha}^{\text{max}} - 1$
 $\gamma_{\alpha} = \gamma_{\alpha}^{\text{max}} - 1$
 $\gamma_{\alpha} = \gamma_{\alpha}^{\text{max}} - 1$



at the same time, the fact that the *de novo* mutation rate is high in the *de novo* mutation rate is not a good indicator of the mutation rate in the *de novo* mutation rate.

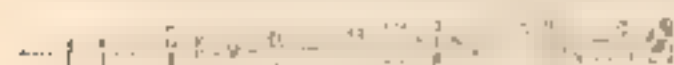


The following is the main theorem of [1] (see also [3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839,

On the edge of the lake, one can find the English and Polish the Arch, with a single hour of the system.

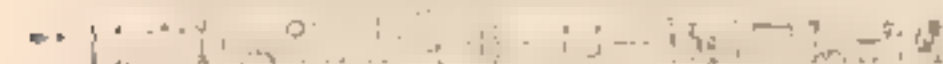


In 1870, land for settlement was granted a street front of 16
north, a depth of 100 ft. or more, the lot being 100 ft.

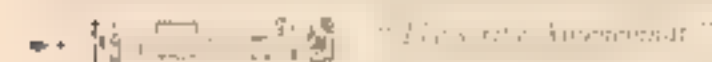


* For the first time, the company's return on investment is higher than the industry's.

The *Journal of the American Statistical Association* is published quarterly.

[illegible]

And finally let us note how a comparison of the two cases at the right affords



The modelling of the robe points, especially the arms and back, is extraordinarily delicate and the whole treatment recalls that of the fine early period, rather than the XVIIIth Dynasty.

*The sign before "Annohachi" must be a title, unless it is a determinative of *hachi* = "son of, descendant of". But the reading "Annohachi" is more likely because of *hachi* in *hachiro* below, and perhaps *hachi* in *hachiro* has *hachi* (see below, p. 202).

The third statue, 42 in. high, which lay a few inches from the others, also represents a scribe (Pl. 37). It is of the same stone as the larger of the two hymes of Amenemhat but far inferior to it in execution, the relief being comparatively flat, the style lacking and uninspired. The name of the scribe is Aahmes whose father was also Aahmes, a judge. He sits upright on a stone seat clothed in a long robe reaching from neck to ankles out of which appear his hands crossed in front of his breast.

On the right side of the stone seat is an inscription in four horizontal lines:

— [Hieroglyphs] — [Hieroglyphs] — [Hieroglyphs] — [Hieroglyphs]

"An offering which the king gives! Amen lord of the Thrones of the Two Lands may they grant funeral offerings of bread, beer, flesh, gold, everything good and pure."

— [Hieroglyphs] — [Hieroglyphs] — [Hieroglyphs] — [Hieroglyphs]

"for the ka of the scribe Aahmes, begotten of the daughter of Bedu."

and on the left side in four horizontal lines:

— [Hieroglyphs] — [Hieroglyphs] — [Hieroglyphs] — [Hieroglyphs]

† [Hieroglyphs]

"An offering which the king gives! Amen lord of the Thrones of the Two Lands, Besekhshute may they grant funeral, life and ready eat in every place in which the god lives."

— [Hieroglyphs] — [Hieroglyphs] — [Hieroglyphs] — [Hieroglyphs]

"for the ka of the scribe Aahmes, begotten of the judge Aahmes."

This is also in the Khartoum Museum.

STELAE FOUND NEAR NORTHERN TEMPLE

By a curious chance, part of the fragment of the stela Amenhotat (116482) was found in 1897, then the subject of Amenhotat's temple. It had been taken and cut into circular forms, as to form the base of a column to support the roof of the room. The most interesting part of the fragment and inscriptions however survives (see Pl. 11). Amenhotat's lower temple which right hand is small stand on a base of a column and is a part of the great temple made in the left temple, which is a part of the great temple.

The fragment of the stela Amenhotat is a part of the great temple.

1. Amenhotat is a part of the great temple. Amenhotat is a part of the great temple.

The fragment of the stela Amenhotat is a part of the great temple. Amenhotat is a part of the great temple.

2. Amenhotat is a part of the great temple. Amenhotat is a part of the great temple.

The fragment of the stela Amenhotat is a part of the great temple. Amenhotat is a part of the great temple.

3. Amenhotat is a part of the great temple. Amenhotat is a part of the great temple.

The fragment of the stela Amenhotat is a part of the great temple. Amenhotat is a part of the great temple.

4. Amenhotat is a part of the great temple. Amenhotat is a part of the great temple.

5. Amenhotat is a part of the great temple. Amenhotat is a part of the great temple.


The fragment of the stela Amenhotat is a part of the great temple. Amenhotat is a part of the great temple.

6. Amenhotat is a part of the great temple. Amenhotat is a part of the great temple.

The fragment of the stela Amenhotat is a part of the great temple. Amenhotat is a part of the great temple.


* The fragment of the stela Amenhotat is a part of the great temple.

The fragment of the stela Amenhotat is a part of the great temple. Amenhotat is a part of the great temple.


Above a youth who is holding in his left hand an object behind the chair of the deceased is  "His butler" The name that follows is illegible.

On a buttress of masonry lying face downwards and attached to the side of a ^{side panel} small stela with a rounded top, as is the one in the register of the N level, which dates from the end of the XVIII to the end of the XX Dynasty (1850-1050).

In the upper register are two hieroglyphs, viz. Ptah and Ankh, representing Ptah and Khnum, Satis and Ankh, respectively.


The lower register consists of three vertical lines of inscription, on the right of which are two person-stands and a man  holding a bunch of lotus flowers and pouring a libation into a large jar.

In script in the upper register: *above Ankh*


 "Ankh, lord of the island."

Above Ptah the inscription is destroyed.


Above Khnum is

 "Khnum, lord of the island."


Above Satis is

 "Satis, mistress of the island."

Above Ankh, in two vertical lines, is

 "Ankh, mistress of the island of Sehel."

In the lower register, in three vertical lines, is

 "Offering everything and pure to Khnum, a fine beautiful of countenance, he who is south of the island."

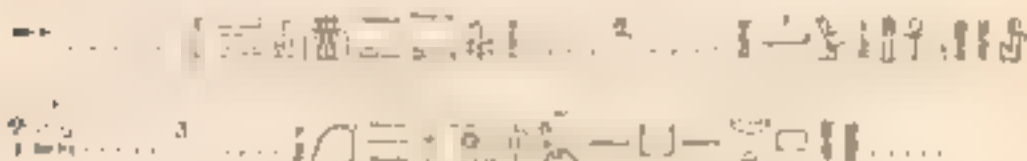
"Offering everything and pure to Khnum, a fine beautiful of countenance, he who is south of the island."

 "for all the gods of Elephantine, made by my lord for his lord (2)!"

"for all the gods of Elephantine, made by my lord for his lord (2)!"

Fragmentary
Stela

At the southwest corner of the "Governor's house," but on the early XVIIIth Dynasty level was found a fragment of a large sandstone stela (10986) belonging to a *nbw pr*, whose name is destroyed. The inscription, the signs of which are large and roughly cut, mentions "Ankh in the south land," and perhaps "Ankh in his hall" (?) All that now remains is in three horizontal lines:



Figures
from the
House
of the
Ancestress,
the New
Temple

Many pots, pots and bowls of rough undecorated earthenware were found about the rooms and house surrounding Ankh's chapel temple. According to a custom still in use among the natives, probably they had been placed not on but before the rooms, lined in the middle with stone or with a cloth with the clay floor, used to serve as a convenient receptacle for any household stores, articles or refuse. They were especially numerous in what have proved to be the "priests' chambers," viz., Nos. 1-14 on the south side of the temple. One of these rooms, No. 12, contained an array of broken pieces of very large dipperware, which occupied almost the whole room to within the floor. The pottery was a redd-burning clay, turned on the wheel and baked in a kiln. The fabric is coarse and rough, sometimes coated with a light wash of limestone and sometimes moulded in very broad, shallow, shallow, which is smooth and covered with a cream-colored slip. The entire series is illustrated on the scale of one-tenth, in the outline drawings of Pl. 38 and photographs of some of the finest specimens are shown in Pl. 39. Examples of representative types were brought back to Philadelphia (Nos. 10972-10974), but the majority of the duplicates were left in situ just as they were found, where they illustrate an interesting and characteristic side of the domestic life of the New Empire.

In the rooms on the north side of the temple (nos. 15-33) were found several complete store jars and many fragments painted with bold decorative designs. A group of four *am-het* (anubis-headed) jars, etc. Three of them were undoubtedly belonging to the type *am-het* (anubis-headed) the fourth is the handsome jar 10977, which is reproduced in the drawing on Pl. 40. A few feet away in an adjoining room was 10975, which is illustrated in the same plate; but

10974, a smaller pot, was found under the threshold of the entrance door of the temple itself. An unique specimen is 10979 (Pl. 42), fragments of a dish of very large diameter found in room 43. It is handmade, faced with hematite and finely lustrated. The interior is painted with fishes and lotus-flowers in blue-black, the exterior border is painted alternately with a torus-like pattern in blue-black and with a cross-hatched design of white lines edged with blue-black. The two series of designs on the exterior border are separated by Hathor heads moulded in high relief. The other fragment shown on the same plate, 10984, has been part of the rim of a tall jar and is almost identical in pattern and colouring with 10979 except illustrated of which only the bottom half survives. These painted pots can be dated definitely to the XVIIIth Dynasty, as the rooms in which they were found are of the temple period (cf. above, p. 107).

Uniquely
found in the
house of
10979, the
fragments of
the
dish
found
in the
Temple

A number of impressions in clay of scarabs and other figures were found in various parts of the dwellings surrounding Amenthotes temple. These are figured on Pl. 41. With only two exceptions they were found in the lowest stratum of all, but this fact of little value for dating purposes, although the illustration represents the XIIth Dynasty, yet the style with which it was filled was put there in the XVIIIth Dynasty. With the exception of one example, not illustrated which bears the name of Menkheperê (Thothmes III) there are no royal names and most of the designs are purely decorative. Sometimes the seal impressions had evidently been attached to pieces of papyrus, the imprint of which was still visible on the clay.

Sealings
found in the
house of
10979, the
fragments of
the
dish
found
in the
Temple

Scattered over the whole area between the two temples were large oval clay sealings averaging 6 by 8 centimetres in size when complete but very frequently broken. The majority of them were found in the lowest stratum but belong no doubt to the XVIIIth Dynasty. The most common type is represented by the first illustration in the lower line of Pl. 42, which is actually a restoration made from the comparison of many partially destroyed sealings. The king, wearing an ostrich feather and holding a bow in his left hand, grasps in his right the cord with which the arms of his prisoner are bound. Between the two figures is the symbol *Amentit* and below them is a dog. There were apparently several variants of this subject, in one of which a quadruped, perhaps a goat, stands instead of the symbol *Amentit*. In another there are traces of signs above the heads of the two human figures. This and Nos. 10933 a, b, very closely resemble the sealings found in the XVIIIth Dynasty Nubian castle at Areika (see "Areika," Eckley H. Coxe Junior Expedition, Vol. I, Pl. 9).

Sealings
from the
Theban
abutting
the Northern
Temple

Another class on the large oval sealings represents animals, a sheep, goat, jackal, bull, ox, or rattle; (Pl. 42, Nos. 10001, 10023, 10026). In Pl. 43, Nos. 10023 to 10026, are the pottery stamps from which were made impressions similar to those shown below as Nos. 10028, 10029, 10030, 10031. But we did not find actual impressions of these particular stamps. No 10023 was found in room C of Amenhotep's temple; 10024 in the buildings west of Hatshepsut's temple and 10025 just to the north of the north wall of the inner city.

CHAPTER VII

THE OUTER FORTIFICATIONS

It has already been briefly stated that the outer fortifications of Hubei consisted of a great wall, heavily buttressed on the outer side, beyond which was a dry moat with low walls and stakes running along either lip (see Plan C). The defences on the river front have perished, and elsewhere all have suffered so severely that their foundations only could be traced, and even these sometimes failed altogether. Our excavations started at the northeast corner of the town, where the north wall met the river bank, and a detailed description of the enceinte might begin at this point (see Plan D).

The main wall ran straight from the river to the rock face, across the long slope of sand that separates the desert plateau from the bank, a distance of about a hundred and thirty metres. It was heavily buttressed and had a breadth of 8 p' m. at the base while the buttresses met closely together along the northern face projected another metre and a half. The wall was of brick throughout, not solid, but built in chambers, of which some were partially sand-filled (this for economy in construction), while others would be kept open as living-towers and magazines; the wall was ruined too much for these chambers to be traced in any detail, but the system was obvious enough, and the rising course of the masonry being rough proof of the characteristically Eighteenth Dynasty form. Soxi showed at once the use and the date of them. So complete had the destruction been that for the most part only the solid-surface portions of the foundations could be traced, with its projecting buttresses, and much even of this had disappeared, leaving only a shapeless pile of brick lying in the sand; the extent of the surviving parts can be seen on the plan. Where the bank sloped steeply down to the river, solid foundations of rough sandstone underlay the brick supporting the end of the wall; the actual return along the river bank had been swept away.

Here, in the loose sand, no moat was possible; it would have been silted up in a few weeks, in place of it, therefore, were two small and weak walls running parallel with each other, about five metres apart and as much again from the footing of the buttresses, forming, in military terms, an 'obstacle'; they would not be manned by the defenders but would give assailants a pause during which they

*The North
Wall*

would be subject to a heavy fire from the wall proper. The line of these walls was not parallel throughout to that of the innermost wall, but was broken by two salients. The first of these came at the wall on the river bank; it enclosed an oblong area of about thirty metres by fifteen, within which could be traced the mud floor of some building whose walls had disappeared; probably this was a gateway with an entrance lower analogous to that at the southeast corner of the fortification. About halfway between the river and the rock is a similar but smaller salient enclosed a tower of which the heavy stone foundations remained. The building ran right up against the face of the main wall, obliterating one of the buttresses, and the inner of the two curtain walls had here been thickened out to a width of 4 metres so as practically to touch the tower and to form with it a redoubt in the scheme of defence. The strategic importance of the towers in these salients is obvious, and on the north and south sides of the city, where circumstances made this most desirable, they are set very closely together, an enemy who advanced over the sand and found himself in the narrow space between the two curtain walls would be exposed to a heavy range fire from both flanks at once, as well as from the parapets in front of him, for the towers project just far enough to take the line between these walls. The character of the towers could not be recovered, but the foundations of that at the central fortification were roughly in the form of the letter H, each of its corners was a two-phased brick, one narrow and one 4 metres wide, raised slightly above the pavement of mud brick that covered uniformly the space between the inner curtain wall and the main parapets.

*The Inner
Wall and
Moat*

As soon as the line of defence reached the edge of the plateau began the regular moat (see Plan 11). This was cut down into the solid rock, it was six metres wide and three and a half metres deep, with sides that sloped steeply down to a flat bottom and were channelled with remarkable smoothness and regularity. The low brick walls rose directly from the edge of the lip, and would serve not only to make the obstacle more formidable but also to keep the great heap of drift sand, which would accumulate against the outer wall-face instead of settling in the cutting.

At the northwest corner the moat was taken out into a salient enclosing a slight eminence in the plateau that commanded the little sandy valley separating the town from the New Empire cemetery on the north, here doubtless had been a tower that would also take the rearer lines of defence along the north and western sides, but even its foundations had disappeared. The angle of the main wall had also been ruined away and the wall was only recovered some eighty metres from

where the return must have been, behind a second and smaller salient, here it ran in a line roughly parallel to that of the moat retaining its system of regularly placed outer buttresses. Even here its thickness could not be determined (the wall broke away behind with a width of about 1.50 m.) and after about forty metres the buttresses also lost their form and, as the wall mounted again on to the higher and more exposed rock level, all traces of brickwork disappeared. Some eighty metres further on, where a break occurred in the rock face and the foundations of the wall had had to be sunk deeper in the sand, traces of the former face were found with a large buttress on the inside—a feature not found elsewhere. The rock edge itself on either side of this fragment of the old defence, had been cut back to a perpendicular face, but it seemed that this was rather for the convenience of houses backed on the rock inside the line of fortifications than due to any peculiar feature of the fortifications themselves.

*The Head
Wall and
Moat*

South of the great western salient which jutted out from the main line in the direction of our house, things became sadly confused. For some distance the wall had run along the rock plateau from which the traces of brickwork had disappeared even more thoroughly than within the great salient itself, then it climbed down the slope in whose base the tombs of the Middle Kingdom had been cut on to lower and somewhat less level ground. Either here or on the preceding level it had changed its course to follow the lines of the moat, by the similar fragments of tumbled and shapeless brickwork seemed to show that the relative distance between moat and wall had been highly increased. When the true wall-face could be picked up again after a break in which no sign of construction could be found, there was a clear, squarely-cut end projecting beyond the outer line and supported by a semi-circular bastion, or more probably constructional buttress, perhaps intended to strengthen the corner of a right-angled return connecting the two lengths of wall which, as seen on the plan, would not otherwise meet.*

From this point the wall ran on unbroken to the beginning of the south-western salient. It had no external buttresses, but the outer face (which alone could be traced) was broken by shallow rectangular cannellations running vertically up it which looked as if the wall had been strengthened with upright beams; there was also good evidence for flat landing towers having been built on through the

*Or possibly we have here the site of a skew gateway of which the eastern jamb attached to the end of the other wall must have disappeared, but no evidence of this other than the curious form of wall's end and buttress could be secured and a gateway here is not in itself very probable.

*The West
Wall and
Moat*

thickness of the wall—a feature that also occurs in the fortress of Merghsa, ten miles south of Buhen. On the high upstanding rock enclosed by the southwestern salient the remains of brickwork were very scanty and confused, but it would appear that there was here a gateway giving access from the corner tower.

*The South
Wall*

From this point the defences were carried down over the sand to the river bank. As at the northern end the moat was abandoned and the double obstacle-walls took its place, running out halfway to the river into a salient wherein the stone foundations of a tower could with difficulty be traced, and forming at the river's edge a second salient or bastion wall wherein had been a gateway. In precise conformity with this plan is on the north the main wall, which went straight from corner to corner, and was heavily crenellated externally, only at its eastern end was insufficiently preserved to admit of being exactly planned. The gateway was between the second and third outposts and gave on the banked-off space between the main and the curtain wall. Here if the exit must have been by a turn to the left and thence straight through the two inner bastions (see Plan G).

*The East
Wall*

This east wall, for the most part at any rate, ran away into the river, no excavations were attempted between the southeast corner and the temple of Hatchingant. North of the temple a low parallel wall connected by cross walls, running up to the base of the Middle Kingdom fortress wall between the two temples, may be taken to show that the Egyptian had connected his incorporated northern new lines of fortification with the old fortress, and continued it northwards by a wall built on the same principle. The last traces of such a possible wall were found about halfway between Hatchingant's temple and the northeast corner of the camp. Here it then ran up to run right up against the northern main wall, a point some sixty metres south of where it was ruined away altogether, was extremely conspicuous. The outer features of this consisted of a triple row of brickwork, each brick or brick course very thick and separated from the next by one brick's length of space. Between the lines were bricks laid across lengthwise at a distance of a pace from each other so that the whole formed a series of shallow box-like compartments. Mud mortar had been very freely used. As there were great bricks resting on the outside of the line, where the bank sloped steeply down, it is probable that there had been another or an indefinite number of other longitudinal rows similarly divided into squares. One can only suppose that this is the lowest course of a compartment wall with unusually small compartments, as each course was laid, on each new course, the boxes would have been filled with sand, a complete brick course laid above, and then a new series of boxes begun. The saving of material would have been

fifty per cent. and the saving in labor thus is equally great, but the result can hardly be imagined as altogether satisfactory if strength of construction was desired. Within this wall a good foot or more face was a serpentine wall a foot thick, of which one or two courses remained. The character of this betrays its purpose fairly conclusively. A serpentine wall is the cheapest and most effective form of retaining-wall, since the curved surface prevents the weight behind from exercising direct lateral thrust at any one point, each brick is more or less buttressed by its neighbor, and such a wall, even though of only one brick's thickness, can be taken up to a considerable height. This is the principle of the famous serpentine wall at the University of Virginia. The compartment wall (presumably the outer wall of the town, or perhaps a later patching of the original construction, and the serpentine wall were both built upon the hard mud deposit or the bank behind the latter the platform sand must have formed a higher platform, the level of which in this quarter of the town the Eighteenth Dynasty buildings were erected. The collapse of this retaining-wall would be followed by the entire derangement of the level immediately behind and would account for the non-existence of buildings in this corner of the city.

Far East
Wall

Serpentine
Wall

Within the town area, between the northeast corner and the temple of Amenhotep, was a building very unusual in character to that just described. A roughly circular area, with a entrance on the south of which one side only remained, was enclosed by an irregular serpentine wall. This is of a single brick's thickness, with occasionally a header mounted so as to project behind and land with the filling, the outer face of the wall is well washed, the inner left rough; the wall has disappeared on the east side, but on the north it stands as much as six courses high. It is quite clear that this is a retaining-wall for a sand platform, for there is no mud deposit against the outer face from the level of its foundations upwards, but inside the filling up to the level to which the wall stands, is of clean sand. The retaining-wall was raised, the platform consequently gave way, and the building on it disappeared, entirely from this ruin, and clean drifted sand covered the whole site and thus fitted it into a more mound. On this mound was later erected a building of which a few heavy walls survive, it covered an area larger than the original enclosure, and its walls run over the top of the serpentine wall and the sand that had piled itself against it. Over the ruins of this building had been a poor flimsily-constructed house, of which several rooms with hearths and bake ovens could be planned. All these three periods of building come within the New Empire. Against the outer face of the serpentine wall, on a level with its foundations, were found on the west side fragments of painted jars

*Serpentine
Wall*

resembling those figured on Pl. 40 and lots of the form S. xxi, at the northeast an alabaster vase (crafter Pl. 66) which can well be of the New Empire, and at the southwest a small Isis figure of poor fine glaze which is definitely of that period. Under the floor of the latest house and well above the clean sand that marks the stratum between the first and second foundations were found a great number of small votive pendants, one of these bore the name of Menkheper-Ré (Theofanes 39). Others showing Horus of Buhen and other types are figured on Pl. 40. From this poor late-late New Empire stratum of New Empire pottery and a stone grinder and other things. The serpentine wall, whose foundations are well above the present level of the Middle Empire walls that underlie Amenhotep's temple to the south, must be dated to the early part of the Eighteenth Dynasty, and would correspond to the solid black parts in Plan D. The second conclusion is that of Hatchepout and Theofanes 39, also planned in black, and the house above it, as well as into the Twentieth Dynasty and correspond to the walls shown in the plan in hatching. It is impossible to say anything of the nature of the earliest building, seeing that only the foundations of its platform remain, and its chief importance is to illustrate the purpose of the serpentine wall in the northeast corner of the fortress.

CHAPTER VIII

THE ROMAN-NUBIAN REMAINS

The Romano-Nubian site lay some 500 metres south of the walls of Bahari. It had been an open village of 10-12 houses and a little experimental work soon showed that it would not repay the labour of excavation. Only two buildings were thoroughly cleared. One of these, a small house laid out on a very simple plan (Pl. 68 and Plan B), was built like most of the villages of rough sandstone rubble and herring-bone fashion, the stones set on edge and of two opposite directions in alternate courses. It was much ruined and so close that three courses remained standing in any part. Except for the shreds of characteristic pottery that littered all the site there were no objects found in the house worth recording.

Just south of this again, the edge of the plateau was a curious though much ruined building which from its ground-plan we took to be a small temple (Pl. 69a). At the east end was a narrow stairway, of which four steps remained, leading to a rectangular platform with a rising wall of coursed rubble and a solid filling of stones and sand. Its original level could not be judged, if the whole of the approach was sloped, the height must have been considerable; but very likely the steps were continued by a level passage, and the platform may have been not much higher than it is at present. On the platform near the top of the stairs was found loose in the sand the plain stone base of a column with a diameter of 0.50 m. In the middle of the west side was a second shorter stairway leading to another and higher platform on the rock. Full along the line of its front wall the rock had been cut back to a perpendicular face, but above the walls had disappeared and the traces of brick were not sufficient to give even the dimensions of the original court. The whole building was of a mixture of mud-brick and coursed rubble, amongst the latter being a good deal of ashlar stone taken from older buildings. The corners were carefully set, but the general style of construction was bad in the extreme. At the west end of the court a point is marked with an asterisk on the plan (Plan B); was found a bronze coin of the Cleopatra *obverse*, dialled (lost of Cleopatra 7th, *reverse*, eagle I, on thunderbolt, to 1 double cornucopia, to r. II, legend ΚΑΙΟΠΑΤΡΑΙ ΒΑΣΙΛΕΥΣΗΣ; struck in Alexandria (Brit. Mus. Cat., No. 5, Pl. xxx. 7). At the point marked (a) was another coin, an illegible 'third brass';

A House
Site

The
Temple (B)

at 13) was a very small Menoitic ostrakon and at 14 a fragment of a stone offering-table, with Menoitic inscription. It is worth mentioning here that in the hill-sandy valley that separates the Hühen fortress from the New Empire cemetery H to the north of it there was found a well-preserved coin of the Emperor Probus, Philadelphus, of Cyprus, *obverse*, laureate-headed Zeus, *reverse*, eagle with wings open, to l. S over a shield, between eagle's legs P, legend **ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΥΣ** (Brit. Mus. Cat., No. 19, 1, 13, 10, 3). These coins may be evidence that we have to do with one of the old settlements of the true Menoitic people, at which time were destroyed by Persian invasions between Kay Ushin and the Second Cataract, and we cannot definitely state that there was a subsequent Meroitic occupation here, though the pottery is precisely that with which the Meroitic settlements of Karanig have been identified, though we do not yet know what the Menoitic pottery of the first century B.C. was like. Presumably it resembled the Meroitic, which was derived from it, but whether that second later approached plenty we cannot as yet be sure. Certainly on the Hühen site, where the early coins were found, there was no pottery revealed of a type sufficiently distinct from that of Karanig to be referred to an earlier period, we must suppose either that the ruins were a survival and the pottery only a later than that date, or that the Meroitic style of pottery goes back without marked differences at least into the first century B.C., a not unnatural supposition, seeing that the pottery continues practically unchanged during the four hundred years covered by the cemetery of Karanig.

The High
Altar

Almost due north of the Uebel Turb was a long heap-shack ridge, which curving round slightly to the west came to a point over against Uebel Turb, and was divided from it by a very narrow low lying pass. On the very point of the ridge were the ruins of a small brick building, of which a plan is shown in Plan F. Most of the walls had perished down to their foundations, only the solid remains of brickwork in the middle and the walls of the double hearth-chimney in the northwest chamber stood some 65 cm. high. Doorways could with difficulty be made out, and the main entrance could not be found at all. Judging from the thickness of its walls, the southwest chamber may well have been domed and the roof vaulted, but on the ruined site no roofing bricks were to be seen and the character of the building must remain conjectural. A few fragments of pottery were found, all of Romano-Nubian type. Amongst the walls and littered over the little artificial platform built out over the point of the hill and over the steep hill sides, down which they must have been willfully flung, were found pieces of three sandstone lattice screens or windows, in two of these the open-work design had had for its

motives peculiar, gryphon-like birds and in wood urns, statues, while various floral elements, may have been combined with these or may have belonged to the third series. The workmanship is remarkably delicate, especially when the coarse nature of the sandstone is considered, the curved lattice bars being sometimes no more than half a centimetre in width, and fortunately this delicacy made the destruction of the whole the more complete and the fragments collected from the hill-sides represent but a small part of the originals and do not suffice to restore their design. These stone carvings, which seem to be peculiar to Romano-Nubian art, are dealt with more fully elsewhere.⁷ For this series. Judging from the elaborate decoration and from the isolated and commanding position of the building, there can be little doubt that it was a Romano-Nubian shrine analogous, except in so far as it was not a burial place, to the modern Shesheki tombs that crown the hill-top behind Karsaki, at Kass Ibeli, and elsewhere, and are periodically visited by the devout.

Below the hill and at some distance to the south of it were a number of low mounds. Six were opened and proved to be grave mounds. The pits were roughly circular, cut in the sand with a diameter of about 1 metre and a depth of about 0.60 m.; they were covered with rough flag stones over which a heap of sand was made and stones piled on the top of it. The lids, however, were hewn boards and the bones lay in a bundle at the end of them. There was not more than one body to a pit, but in several cases not nearly all the bones of one body were present. The skin was buried with the bones. The bones were not burned but there were fragments of burnt charcoal among them. Probably these graves were suicidal victims of which the remains had not been decently got rid of the way. Just there is no means of arriving at their date, whether they are of Egyptian or Romano-Nubian times, and the graves are described here mainly because they stand in closer geographical relation with the Romano-Nubian remains.

Between the grave mounds and the river, on the plateau above the Metonic town, were graves of the same date as the town, of which a few were opened. They were small and poor, corresponding to the meanest types of the Karanóg graves, and clearly not worth more labour than would suffice to establish their period and character. Three of them may be described as typical.

S 7. Type A 4*. Pit cut in the sand 1.20 m. deep, chamber 1.60 m. by 0.50 m., walls one course of bricks high, roof vaulted with bricks leaned towards one another, with part of a third cut as a voussoir to cap the arch. The grave lay east by west:

* For types see vol. III, ch. 3.

The Tomb it had been opened from above and contained scattered bones of *S.*, also in the grave were some leather, apparently belonging to a belt and apone, a bone hair-pin; fragments of an iron knife; two plain rings of bronze (*S. carotings*); a whetstone.

S.3. Type C1. Reached in the west side of its shaft, chamber lying north by south, walled off with stone sides, 1.45 m. by 0.80 m. and 1.55 m. deep. Grave had been opened from shaft, not a body, disturbed, but had been doubled up with the knees to the chin. There were remains of coarse cloth round the body. Also in the tomb were two pots. F. vii (a rather long variant), red with black and white rings, and F. xxviii of very coarse red clay.

S.4. Type D1. Tomb with shaft by south, chamber lay east by west, 1.30 m. by 0.90 m. and 1.80 m. deep. Had been opened from its front. Remains of a body, disturbed, but had been doubled up. Round the body were remains of rough cloth, bones with a round red band, also in the tomb, rough plain leather sandals with no uppers, pots F. vi, plain red clay, F. x, two examples, plain red, height 0.07 m.

The Tomb

Distinct that the bodies were flexed differentiates these tombs from those of Karanbg and may point to their belonging to the older Mesquite culture rather than to the Hengyan, though the Nubians at a late period of the Hengyan occupation seem to have followed this custom of burial (*J. Archaeological Survey of Nubia, Bulletin*, 1934, 11), but since the pottery, both from these tombs and from the nearest tomb of the old Egyptian cemeteries, resembles that from Karanbg more closely than it does that from Dr. Reinert's excavations referred to above, the earlier dating, which would also agree better with the Ptolemaic coins from the town, must be considered the more probable. In the H cemetery two distinct Roman Nubian burials were found undisturbed, and in each of these the body was in the normal Hengyan position, extended on the back, with the hands folded over the pelvis. If we have here two periods, marked by two distinct racial sites, of which the Hengyan is well established, the other is more likely to precede than to follow it.

CHAPTER IX

THE EIGHTEENTH DYNASTY CEMETERIES

The two cemeteries H and J lay north and south respectively of the house¹ built by the expedition. But, though distinct in position and to a large extent different in the character of their tombs, they must be regarded as of the same date. A few of the shaft tombs of cemetery J were possibly first cut in the Twelfth Dynasty and subsequently reused for Eighteenth Dynasty burials, and a certain number of graves in the northern cemetery showed by their contents that its use was continuous through the Nineteenth Dynasty. In fact it was probable that interments were made here up to the time when, in the Twentieth Dynasty, Bubon was deserted. But during the Eighteenth Dynasty the two cemeteries were repeatedly enlarded, and the massing of their contents belong to this period. Both cemeteries were plundered during the Komata-Nubian period and many of the graves reused by the people of the Meriam-town, a fresh plundering took place in or shortly after that period but nevertheless the graves seem to have remained undisturbed.

Cemetery H lay on and just below the edge of the rock plateau on which our house was built. The north-west corner of the XVIIIth Dynasty enclosure wall enclosed a projecting tongue of rock slightly higher than the rest of the plateau and rising away on the north to a shallow sandy valley. A few tombs lay in the plateau directly west of this corner-slope but the greater number were north of the valley. On the flat tableland were the shaft graves that formed the majority of the tombs, the shafts from two to five meters deep with from one to seven chambers opening out of them. As a rule the brick superstructures had disappeared but in one or two cases (see H 42, Pl. 44) the stone cover slabs were still in place above the shafts and there were a few courses left of a brick rectangle, which sometimes was a small pointed-chapel surmounted by a barrel vault and a pyramidion like those of the XXth Dynasty excavated by the expedition at Andeh. Sometimes this chapel had around it or in front of it a small brick-walled courtyard, more often this was lacking. The chapel itself always stood directly above the shaft of the tomb whose cover slab formed its floor, not, as at Andeh, a little way to the west of it. At the edge of the plateau, where the rock shelves

Cemetery II away and disappears under the sand that slopes down from it to the river, were cut a few tents with a stepped or sloping dome and a door at the end of it leading into chambers whose pillars supporting the roof made more close the analogy to the Theban gallery tombs of which these are a local adaptation. Here there were no traces left of superstructures, but the original appearance of the graves can with tolerable certainty be recovered from the superstructures of the similar XIIth Dynasty graves further to the south (see below, Chap. 1, §). Besides these rock-cut tombs there were in the sandy ravine already mentioned, and in the drifted sand below the edge of the rock, a certain number of brick-lined trench tombs and of plain surface urds belonging to the same period but to the poorest classes.

Cemetery I. On the round hill below the house our littered porters had pointed to the possibility of tombs existing there but it was surprising to find the hill so deeply honeycombed by the roughly tunnel-like graves of the poorest people of the Eighteenth and following dynasties. There were twenty-five tombs in the hill including two surface urds and two galleries that were in a state too dangerous to attempt our working them, and from the twenty-five tombs were recorded no less than three hundred and thirty-six *was* while the original number may have been still greater. Apart from the quantity of pleasing small objects that they produced the *was* were chiefly interesting rather than their superstructures or their properly appointed *ankh* *was* *was* *was* were well preserved, the photographist J. 13, 10, 11, 42 shows well the small *was* present with its low wall, the heavy wall behind that marks the rock face, the open cutting in the rock, brick-lined and vaulted, that led to the tomb proper and really the doorway opening into the chamber cut in the rock. It would seem that the stela giving the names etc. of the dead were set up in the vaulted approach, the outer vault was perhaps used for offerings made at the tomb.

Below the hill approximately 2000 yds. (Gebel Tindah) the Hill of Tombs, were two plateaus of rock, an upper and a lower, on each of these were found scattered shaft tombs resembling in every particular those of dynasty II and in the low rock face where the upper plateau took away to the lower level was a series of small gallery tomb tombs exactly like those in the other cemetery. These, like the tombs in the hill, belonged wholly to the New Empire, or not exclusively to the Eighteenth Dynasty. The shaft graves judging from the general character of their contents dated from the same period and in the occurrence in J. 38 of a cylinder seal bearing the name of Amenhotep enclosed in a cartouche suggests that the grave may have belonged originally to the Twelfth Dynasty, yet it must be remembered that the name was used for private persons as late as the Eighteenth.

The tombs, having been exempt from the repeated modern plunderings from which the cemeteries of Egypt have suffered, were remarkably productive, it was the exception and not the rule to open a tomb in which there was not some object of interest and importance. Thanks partly to the efforts of ancient robbers, but more to the ravages of white ants, the sarcophagi and the wooden furniture had entirely perished. Films of paint lying upon a shell of gold that crumbled at the touch, or a rare fragment, such as the wooden figure of eyes from H 15 (Pl. 64), were a proof more tantalizing than satisfactory of what had been lost. Of metal and less perishable things there are stores richly varied: pottery vessels, scarabs and small bronze objects were very numerous, and owing to the number of such objects occurring often in a single grave there was unusually good evidence for exact dating. Alabaster and other stone vessels were very common, but unfortunately the soil had not dealt kindly with these, and in the bulk of cases the surface of the stone had so far deteriorated as to make the specimens of small value for museum purposes. The few better preserved examples were divided between Khartoum and Philadelphia, and the rest, as most of the metal ware with remaining, were taken en masse to Khartoum. Among the small examples is a small steatite snout bowl inscribed with the name of Imhotep, son of Amenhotep of El-phantane, and an alabaster jug which resembles the Philadelphia specimen No. 10496 (Pl. 66). Philadelphia, besides this jug, has the fine alabaster jug No. 10499, a steatite jug 10502, a steatite cup 10507, and more remarkable, a small kohlpot of beautifully polished obsidian (see also Pl. 67). Khlots of blue agate were found as well in graves of the Eighteenth as in those of the Twelfth Dynasty.

The blue faience was generally speaking of poor quality. This inferiority is a matter not of date but of local production, and just as the production of Hadram blue was produced there long after the Eighteenth Dynasty, during that time there were made at other factories wares of polished and polished surfaces. An interesting example is Buhen's No. 10492 (Pl. 68), an imitation in glaze of the late Mycenaean vase type of which many mirrored pottery examples are known (No. 10493 (Pl. 46). The scarabs were very numerous, only two, too bad being found in the two New Egypt cemeteries, the capital names include Hatshepsut, Thothmes 3^d, Amenhotep 2^d, Akhenaten 3^d, Tutmose IV, Ramesses 1st, Ramesses 2^d, and Ramesses 4th, about the period between the Twelfth and Eighteenth Dynasties. Arkh-meliken and Yakh-sen (Pl. 69).

The greater part of the pottery was of the normal Eighteenth Dynasty types, as can be seen from Pl. 47-48. A single example of a jar was made at very far from Buhen, and the presence of one or two 'western' may even point to a

7-2
Furnace.

Pottery

local manufacture. Some of the vessels, especially the larger sorts, S i, ii, vi, are of the greenish-grey ware common in the Twelfth and Eighteenth Dynasties alike; the majority are of rough red or fir-wash drab clay, either with a natural surface merely smoothed in the potting or with a haematite wash; only the smaller vessels are furnished, particularly S xxi more often so than is S xxii, which seems to be a cheaper sort, S xxxii, xxxvii, liii. A white slip, which often flares to pink, is common in S xxxi, xxxvi, xxxix, xl, lvi. Howls (S xxi, xxii, xxviii) were often of a light wash-colored clay with a narrow band of red paint applied to the rim, at Heliopolis is particularly common in the XVIIIth Dynasty graves; Iw here and at Amshut it continues through the XIXth to the XXth Dynasty. Only occasionally, usually in S xxi, xxii, xxvi, xxxi was the place of this red colour taken by the red band of white paint, more usual on Egyptian sites to which, in the case of S xxi, was sometimes added a rough white slip scrawled right across the interior of the bowl. It is possible that this fashion connects us with the mass of white paint strokes over the interior of similar bowls in the XXth Dynasty. The vase designated as no. 106 (A 7, Pl. 48, 87) with notrop, well illustrating though roughly the somewhat hesitancy of the Eighteenth Dynasty potter, (see example no. 105, how, traces of red and white paint on the wings, the others are slip-wash) on the two pages (nos. 4, Pl. 5) found in a single tomb, there are on the burnished red surface outline drawing of gazelles rubbing at a bush, the painting of naturalistic figures on pottery is very unusual at the period and belongs to much rather some of the Tell el-Amarna pottery. There was found in a tomb containing the Amenhotep temple part of a great red pottery dish with *heliopolis* painted on it (Pl. 49) but in this case the decoration is of a slightly poorer type than that of the vase no. 106, whereas there is no such analogy for the two pigs, which are clearly due to a more frank of the potter's fancy. The vase, no. 104 (S xli, Pl. 47) differs in shape from an alabaster original. The jug, no. 105 (S xxxviii, Pl. 47) has a peculiar handle the name of analogies for which are to be found in Italy in the Bronze Age. Impressed Mycenaean stirrup-vases (S xli) and the degeneration of that type (S xli, Pl. 12) were of fairly common occurrence; a more interesting vase of foreign make is no. 107, Pl. 48, which was found in the K cemetery, but not better be mentioned here. A fragment of a XIIth Dynasty bowl had been plundered and filled up and on the surface of the red wash and sand lay an undecorated XVIIIth Dynasty bowl at the bottom of the filling it, and therefore belonging apparently to the earlier interment were the fragments of this vase. It is undoubtedly of Egyptian origin so far as the decoration and the paint are concerned,

but the ware and the shape are neither Cretan nor Median, and the vessel must come from some as yet unknown centre where Mesopotamian influence was strong.

On Pl. 40 are shown some of the numerous examples that were found in both ^{Tell-el-}cemeteries of small black ware ^{Lebanon} vessels with painted decoration. The clay ^{is of} from which these pots are made varies in colour, ranging from brown to grey, with a surface sometimes dark grey, sometimes dark black, and in some of two cases of a brownish red. In texture it is either peculiarly heavy, or is not at all to be described as laminated, and the surface is rather smooth, or large pieces. The surface is sometimes burnished, usually decorated with a design of small punctures made apparently with a roulette; these are then grouped in vertical zones divided by stripes of plain burnished surface. There are three shapes, the squat and the elongated jar with each having a circular foot, and the flattened jariform, with no foot. These vessels which are not known from the excavations at Tell el Yakhudih and at Hierakonpolis, are peculiar to Egypt, especially to the period between the Twelfth and the Eighteenth Dynasties, and to be characteristic of the Hyksos. But at least in Nubia they were not confined to any such narrow limits. Specimens of fragments of this ware and some are found in graves H 24, 23, 30, 31, 45, 46, 74, 76, 78, I 21, 22, 31, 38, 43, 44, K 9, 10, 12, 13, of these that found in tomb H 14 were a variety having a creamy or light surface with straight and wavy horizontal bands of brown paint, the shape however is that of the "Tell el Yakhudih" pots, and it is peculiarly an imitation of another finding. A similar vase but without the painted bands was found in K 1. It is evident that these as well as the examples in the ware of clay with a more or less burnished lustrous surface of local manufacture, for both ware are commonly represented in other shapes, the indigenous character of which has not been questioned. Now of the Hyksos, in which examples of black ware were found Hierakonpolis (1892) with the scroll border common in the XIIIth XIVth Dynasties. H 24 contained a scarab (1892) of Sesotris III, but that this was merely a late removal was shown by the presence of two scarabs of Hatchepsut (1892, 1893) and one of Thothmes III (1892). H 23 had a scarab (1892) of Thothmes III. H 24 a scarab (1892) of Ramesses IInd and H 21 a scarab (1892) of Ramesses IInd. Near the K tombs 10, 11, 12, 13 belong to a cemetery lying inside the XVIIIth Dynasty walls where dated objects were always of the Middle Kingdom and no monuments of the subsequent period occurred (see Chap. XIII). We see therefore that so far from being peculiar to the "intermediate" period the Tell el Yakhudih pots occur at least in Nubia, in the Twelfth, the Eighteenth, Nineteenth and Twentieth Dynasties. Seeing how very common they are here in the south, as against their comparative rarity in

Tomb
of
the
Queen

north Egypt and bearing in mind the Nubian fondness for black incised pottery which began in the earliest period and lasted down till the end of the Roman-Nubian, we have little hesitation in assuming that though the shape is due to foreign influence a considerable proportion of the actual specimens are of local manufacture. The native potters would not be slow to imitate forms which were first presented to them in a rather peculiarly suggested, the decoration of punctured triangles, etc. (see Pl. 59) is so less indigenous to Nubia than it is in many other places, and perhaps the continued use of this ware after its apparent disappearance from Egypt, whence at least no recorded XIXth or XXth Dynasty specimens have as yet come, may be a further and a final argument for its manufacture in the south.

Black
topped
Pottery

Another indicator whose date we found now though not unexpected evidence is the black-topped ware which was recorded from XIXth-XVIIIth Dynasty tombs of Heliopolis. The two characteristic forms of this highly decorated Egyptian fabric marked by the black incised surface and the horizontal black line, with a wavy grey band separating it from the red body, (see Pl. 60) occurred in tombs H 1, 6, 8, 16, 26, 31, 32, J 11, 14, K 17, 24, 25. Most of the H and J tombs contained shards without name, but undoubtedly New Kingdom, and J 11 had one inscribed

Nubian name. On the other hand, the K tombs are definitely XIXth Dynasty. Many fragments of the same ware were found near and above the fortified wall that forms the north side of the inner fortifications, lying either immediately upon the surface or well above the floor-level of the XVIIIth Dynasty, while in no case were fragments found where digging was carried on below the late XVIIIth Dynasty floor. The most interesting find, however, was in tomb I 34, Pl. 71, 72. This was one of the series of small gallery tombs channelled into the low rock face where the upper plateau breaks away to the east at Gebel Taraka, like those on either side of it, it was one of the XVIIIth Dynasty. It had been plundered, and the rubble debris within the tomb and the drifting sand had filled up the open access to the level of the lintel of the door. On this red body, which prevented access to the XVIIIth Dynasty tomb and was necessarily formed after that had been rattacked by an undisturbed burial, the body, that of a man lay or crouched upon its right side with its head to the east, in front of it lay the body of a goat. Over the man's left thigh rested the splendid ceremonial sword of bronze and ivory (11.42) Pl. 51 and amongst the bones of the goats were the two ornate amulets of ivory and electrum in the form of fishes drawn on the same plate (11.47, A and B) to the southeast of the body, close to the side of the approach, was the fine set of black-topped vases (nos. 10616 figured on Pl. 52. It is of course impossible to say when the

XVIIIth Dynasty *was* plundered, whether within that period or after its close: or to say precisely how long after its plundering the secondary interment took place, but certainly we must put the date at least well forward in the XVIIIth Dynasty. Therefore, as in the case of the Ibbet-Yahudieh pots, we have the production of black-topped pots continued from the Middle Empire until far into the New Empire. In this case, however, there can be no doubt that the pottery is of purely local origin, and that its introduction into Egypt at one period or at another was merely the result of the casual presence there of Nubian immigrants, slaves, or mercenaries. The whole style of the fabric is African, and original, it is typical of the south and common in the south, and most common there where the nature of the soil is similar to the Egyptian, thus in the Egyptian graves at Hadaia later examples occur, whereas in the non-Egyptian and purely Nubian cemetery at I 43 we have a complete series; the fragments on the top of the tomb are very actually dated, contrasted description by the regular Egyptian style, and the fact that we have found the ware most commonly in use was the XVIIIth Dynasty native Nubian 'castle' at Amuleh (Anekeh) ch. 43.

There came from the same station, namely of the Hacheteyi, a considerable quantity of Roman Nubian pottery, including many very fine painted specimens and a larger proportion than was found at Kertouk of black painted hand made vessels. As the University Museum realized very early specimens of that date, and as the civilization is naturally of a similar nature to the Nubian, the mass of this pottery was taken to the Khartoum Museum, and only a few typical examples, chiefly of the black material, were sent to Philadelphia. The best of these are figured on Pl. 59, but in view of the extraordinary richness of such pottery in Vols. III and IV we have not reproduced the remainder. Though the pottery was of a high level of merit, the glass was of a low order, and only one fine glass statue was found (see on Pl. 68), it was of a complete hand form. This also was in the Khartoum Museum.

In tomb J 22 was found an iron implement, presumably a stone-cutter's tool, the blade and the ring that had bound it in a leather handle lying together (Pl. 64). This was the only iron object in any of the two cemeteries. A plain lead bowl was found in tomb J 15 and like nearly all the bronze and lead objects must belong to the XVIIIth-XXth Dynasties. Amongst the bronze objects are to be noted the two lion-stirrers (shown on Pl. 62) with handles in the shape of nude girls, another stirrer with a lion's handle is at Khartoum. A small bronze cleaver in its original wooden sheath is figured on Pl. 63. The splendid dagger

- Bees.* from J 33 has already been mentioned in connection with the black-topped pottery, two others of similar form, but smaller size were found in tombs H 67 and K 32. They probably represent a genuine Nubian type, for the curious bell-shaped handle is very different from the lunar handle of Egyptian daggers of the Eighteenth and Twentieth Dynasties. From the poorer graves came two silver torques with pendants in the form of scarabs and other shells, and copper discs (10327, Pl. 63), on the same plate are shown impressions from the bezels of four bronze finger-rings.
- Gold.* The thorough plastering of the cemeteries in ancient times had left but little in the form of gold for modern excavators. From tomb H 23, however, was recovered a very fine necklace of gold and amethyst beads (about 140 in all found scattered, but some adhering together so as to show original stringing), exactly resembling those from K 6 and K 32 (cf. Froehner's report, *Dispositio* in the Khartoum Museum). Here produced a string of small oval electrum beads (J 36) the remains of a gold necklace of ring beads, cowrie shells and conchium horns (10279, Pl. 62), as with the silver shell pendants to the torques, these fancy beads were all made of very thin metal laid over a core of some kind of composition, the decay of which has left the beads hollow and peculiarly liable to be crushed. From H 82 came a string of plain gold beads with very beautifully made pendants of carnelian and glass in the shape of lotus flowers and lotus buds (Pl. 54). The fly appears to represent an amulet (cf. the ivory and electrum flies of J 31) that it must have a particular local significance in some sort of beads (e.g. 10271, Pl. 51) it forms the principal motive of decoration. A number of other amulets are figured on Pl. 52, 10293, in blue glass, it is worth for 16s. shows a curious treatment of that gold, 10234, carved in carnelian, is also remarkable, probably it represents the emblematic Ptah, 10677, v. in lapis lazuli with minute gold rings for the beetle's eyes.
- Ivory Masks.* Ivory masks in the shape of asses (10348-50) were found in place (see H 82). In the detailed description of tombs H 10, H 100, J 29 there is given the evidence for the reconstruction of the small cluster of clay masks which were so common in these two cemeteries and were used throughout the whole of the period as well as in the XIX Dynasty (see Pl. 62, 63).
- Stelae.* The most interesting stelae found in the two cemeteries were not very numerous. They are roughly cut in the local sandstone and have often suffered considerably from the action of salt. The inscriptions are published below, pp. 180-182, 183.

CHAPTER V

CEMETERY II. DESCRIPTION OF INDIVIDUAL TOMBS.

Now we'll now point out how to find the value of σ_1 and σ_2 in the example - the eigenvalues of the right hand side.

[illegible][illegible]

Temple Hill.

A ruined wall, 3 dm. wide enclosed a courtyard measuring 12.5 m. by 12.5 m. which lay directly over the tomb. Towards the middle of this was the shaft, its edges lined by three or four courses of brickwork 12 m. wide being all that remained of the superstructure proper. The shaft was 4 dm. deep and had 4 corners east and west in the filling were found an unfragmented amethyst jarrah (fig. 21) and fragments of an engraved calcareous stela which was the name of the deceased (fig. 22).

[illegible]

In each nest I found a pair of the eggs, one of which was a very large blackish egg, the other a small blue glass bead, and a small white egg, which was very small. The egg was red clay with a blackish brown, and a small white egg, which was very small, filled with a blackish brown.

In addition, part of the wall were found two small fragments of pottery, one of which had a red and black painted surface and a pattern that was not clearly visible. The other fragment was decorated with a red and black painted surface and a pattern that was not clearly visible. The fragments were found in the same area as the other fragments and were found in the same area as the other fragments.

Томаш Н. А.

No traces of the superstructure remained. The shaft was 3 m. deep, the floor up to the single chambered ~~no~~ trapped and the chamber itself was poorly cut, along its south side ran a low chamber about wide cut in the rock. In the chamber were the remains of the ashes remnants of a wooden excavation and of a wooden chest, and white clay coated two large burnt red clay fragments of two large handmade pots of red clay, one plain the other covered with a whitish slip, and at another small side pot black in section and burned brown on the surface, the shape of these pots could not be distinguished with certainly



2:49 1/2 hr.

were with red parrot found the fish, weight 1.41 m. Six plain red three examples, height 1.00 to 1.25 m. Besides these there were 10 pairs of Reddish-Narrow, silver.

[illegible]

The hard or H-type of redshifts, however, is associated with a different mechanism. The hypothesis of Alpher and Neughts (1969) is that extremely red galaxies are moving away from us very fast, together with a large redshifted ultraviolet background. This is the case of the galaxies in the Virgo cluster. The very red galaxies and the background are moving away from us together, whereas the galaxies in the Virgo cluster are moving away from us separately.

$$\left(\frac{1}{\sqrt{\pi}} \exp(-x^2) \right)^{-1} = \sqrt{\pi} \exp(x^2) = \sqrt{\pi} \sum_{n=0}^{\infty} \frac{x^{2n}}{n!}$$
[illegible]

Tomb H. 4.

A poor grave, there was only one faintly visible within the mound, and it was but 0.54 m. high, on the east side of the large mound, and it was the last of a second chapter, which was never completed. It is dated to the late Roman-Nubian period.

In the chimney were a few bones, but no fish. All the rest of the wall around coffin and of a wooden head rest, fragments of a fish-bone, some pottery (from a jar), a small set of 11 or 12 small green clay beads with a hole in the middle, a small piece of mud-colored clay with a band of red paint round the rim.


$$F_{\text{ext}}(M)^{(1)} =$$

[illegible]

Tomb II c.

The outer enclosure wall would never be thicker than a single layer of 100 lb. bricks which retained a porous, honeycombed appearance. The interior wall was thick too. The shaft was 2 ft. in diameter and was attached to a 10 ft. diameter, 10 ft. high concrete ring above the level of the concrete floor. The ring supported the shaft and was nothing remained. There was only one window in the concrete shaft wall, one of the shaft, and that was the position of the door. The door was made of Rotaneb Sealant.

[illegible]

Tomb II 10.

No sign of overexposure. Photographs made in open day and under moonlight without flash or flash returns but the wide-angle lens, especially the 28 mm, is not quite as sharp as the 50 mm. At the end of the chain of 10 images, the 28 mm lens is noticeably softer than the 50 mm. It may equally well have demonstrated that the exposure is not too short for the 28 mm lens to be properly exposed.

In chamber A there were four groups of cattle, 100, 100, 100 and 100, all the calves piled against the north wall in the chamber. The cattle had been kept in pens with concrete and black varnished floors and the cows were kept in pens with grassed ground, but all the calves were attached by white tags and crimped to the sides of the pens and were not weighed separately, unfortunately, of the practitioners that did remain none bore the traces of the deceased. Immure batches against the

Tomb II 12. Chamber B was empty.

In chamber C were an alabaster sphinx (much damaged), a burnished hair-ring, 10354, a limestone spindle whorl, 10349 and a bronze spindle-whorl, a plaster mark painted yellow, 10350, two plain urshabs, one of green glaze, one of black and white glaze, some brown and white glaze beads, 10344, a small round bottle, S 10345 were cream, a fine late height 0.37 khartum, S 10346a dark ware, height 0.12 m., S 10347, 10348, S 10349 reddish-brown ware, height 0.11 m., 10351 and fragments of another jar, the rim decorated with a bull's head, S 10352 plain red, height 0.11 m., 10353, 10354, S 10355 were cream, shapenose, height 0.11 m. khartum, S 10356 four ear-piles, dull brown, ware is cream, height 0.19 m., S 10357 red clay with string-hanger design in black, height 0.10 m., brownish-brown ware and some indistinguishable fragments.

Tomb II 13.

Tomb II 13. No traces of superstructure. The shaft was 2.5 m. deep with a simple chamber at its west side, the door of which was built in a recessed plastered tunnel with sand to give it a beamed edge. Other than the door the shaft was empty even if the superstructure remained in place, and at least one of the chambers was very shallow. In the chamber were some fragments of pottery, some fragments of wood, some fragments of stone and from a white, shapenose jar like an arrow white shapenose bowl, beads, pottery, a small bronze mirror, some Khartum, S 10358a, 10358b, height 0.11 m., 10359 and fragments of another, S 10360, reddish-brown clay, red wash, height 0.11 m., 10361 and fragments of another, S 10362, S 10363, red ware, undamaged diameter 0.10 m., and fragments of two other similar fragments of a vessel of red ware, cream, white and cream, diameter



FIG. 13.

cream, white and cream, diameter 0.10 m., and fragments of two other similar fragments of a vessel of red ware, cream, white and cream, diameter

Tomb II 14.

Tomb II 14. Remotest of the shaft was a large shallow grave, the middle of which, presumably, the superstructure was. The shaft was 2.5 m. deep with a simple chamber at its west side, the door of which was built in a recessed plastered tunnel with sand to give it a beamed edge. Other than the door the shaft was empty even if the superstructure remained in place, and at least one of the chambers was very shallow. In the chamber were some fragments of pottery, some fragments of wood, some fragments of stone and from a white, shapenose jar like an arrow white shapenose bowl, beads, pottery, a small bronze mirror, some Khartum, S 10358a, 10358b, height 0.11 m., 10359 and fragments of another, S 10360, reddish-brown clay, red wash, height 0.11 m., 10361 and fragments of another, S 10362, S 10363, red ware, undamaged diameter 0.10 m., and fragments of two other similar fragments of a vessel of red ware, cream, white and cream, diameter



FIG. 14.

cream, white and cream, diameter 0.10 m., and fragments of two other similar fragments of a vessel of red ware, cream, white and cream, diameter

Tomb II 15.

Tomb II 15. There had been a north and south grave with a brick retaining wall and a floor of stone chippings, the north grave had been plundered. The shaft was 2.5 m. deep, with chambers to east and west, the chambers were without doorways, plain without reveals. The grave had been plundered and re-used in Roman times and subsequently refilled again.

In the skirt were found a patch of decorative decoration, height 15 cm, shape S shaped square, red clay, length 10 cm. Also of Roman-Norman were P: painted with 'demons' heads between stars, height 10 cm (Kikarion). P: plain red, height 10 cm. P: red with black rings, height 10 cm. P: red with black rings, height 10 cm.

In chamber A were found a bronze tube, diameter 1.5 cm., diameter of an-
nular, glazer mark broken parallel to it and flange with 12 teeth, on the
ear and another white with faint red line, same pattern. 5 small red clay,
unburnished, diameter 2.5 cm. another, brownish red, same diameter, 2.5 cm.,
another, mud-colored clay, with faint red line, same pattern, diameter 2.5 cm.,
another, mud-colored, plain, diameter 2.5 cm. 5 small plain red, unburnished,
diameter 2.5 cm. 5 small fragment.

Chapman, H. A., 1974, 1975

[illegible]

Төрөл Н. 16

Round the top of the shaft was brickwork, some of which was broken down to the level of the roofing tiles. The passage was some five feet wide to the east and west. The shafts of chambers A and B were plain, and were 10 inches in diameter, but round, the walls were well finished and decorated. The shaft of chamber C was square, being finished to the level of the roof. The shaft of chamber D was made of stone, and was 11 inches square. The square hole for the rope by which it had been lowered was in the middle of chamber C. Opposite to the shafts of the other chambers, a small passage

[illegible][illegible]

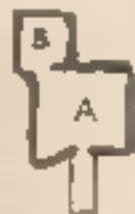
similar, S XXIII is black, translucent, with indented edge, diameter 2.135 m, S for fresh class, $T_{max} = 20^\circ$, height 2.4 m, 10 mm diameter of hole, 2 mm of rim.

In clamber 8 were found an additional 4 large, slightly worn, dark after 200 m yellowish-brown, size 11.5 and 100.0 g, and two very small, white, about washed.

Tomb H 10.

[illegible]

In the quarry were found a pair of *Strophomena* (fig. 1), a small trilobite and a large of pincer. Two corals in situ were also found. A large, thin, white, glass bead, part of which is in the center of the trilobite, is ten times magnified. The trilobite pincer is 8 cm. long, the body 10 cm. long, red clay, height 0.4 m. Six fragments of corals from the same locality, clay, height 0.25 m. Some fragments of corals are found in the same locality, which include two corals and one small fragment of a corals, height 0.1 m. and diameter 0.1 m.



2. *quadrifida* L.

Tornelli, H. 18.

[illegible]

ತುಂಬು ಹೂ.

Two types of superstructure. The shell was 2 m deep and had an oblique set of channels forming part of its wall and floor (Fig. 1). In the center of the shell was a large circular hole, its edges being fixed to the wall and floor by a ring of stones. In the center of the hole was the door (Fig. 1). It had two small holes, one above and one below, opening into a large central space with a small circular hole in the center. Behind this opening and through the opening, a narrow passage was situated, which led to a place of deposition. (Fig. 1). The superstructure was made of stones and mud.

In the stage, wings broadened proximally, distal ends with a small subapical kink; veins on a Δ shaped, convex, long, broad, anterior head, surface of 16-20 setae; antennae long. Pl. 1, 2 (anterior head angles) all long plate, surface of Pl. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825

[illegible]

Field Notes: Fragments of one or two others. S axon light, ground with strong-banquet pattern in dark point. Length 0.115 to 0.130 mm. Slightly male, but not mated.

1. Установите соответствие

$$\ln \left(\frac{r_{\text{eff}}}{r_{\text{eff}}^0} \right) = \ln \left(\frac{r_{\text{eff}}}{r_{\text{eff}}^0} \right)_{\text{exp}} + \ln \left(\frac{r_{\text{eff}}}{r_{\text{eff}}^0} \right)_{\text{calc}} = \ln \left(\frac{r_{\text{eff}}}{r_{\text{eff}}^0} \right)_{\text{exp}} + \ln \left(\frac{r_{\text{eff}}}{r_{\text{eff}}^0} \right)_{\text{calc}}$$
[illegible]

Тема 11. 24

[illegible][illegible][illegible]

Tomb 15 27.

J. m. H. et al.  *Journal of the American Medical Association* 1999; 281: 1000-1001. *DOI: 10.1001/jama.281.10.1000*

[illegible]

Tooth H 42.

A simple trench grate (dishes and wire brush) is used to remove a 10 cm. down the middle of *T. testifera*, which has a trench 10 cm. wide, 10 cm. deep, 10 cm. long.

In the grave were one of two small, thin, oval, brown fragments of a large example. Daughters of a small, rounded, subglobular, brown, smooth, fairly pitted round the rim and a close roughly-screwed to present almost white, dull. Slightly irregular surface with bands of matrix chocolate (1831, fig. 4).

Tomb II 41.

A shallow brick-lined tunnel leads on the edge of the rock plateau, lying north-south. End of pit 1 is 10 m. (33 ft) W. and 4 m. (13 ft) S. of the present entrance. Tunnel

Table 11.42

[illegible]

Tomb H-43

A straightforward (non-iterated) method of determining the maximum value of $f(p)$ for $p \in [0, 1]$ and $f(p) = 0$ is given by the following theorem:

Tomb II 44

A continuation of the line $\text{containing } \mathbf{v}_1$ will not come out with it partly back out, and in $\text{cont}(B)$ again, by a further small part of a shell.

Tomb II 45.

No treatment superintendence. The road was a poor one, with roughness to east and west. *London* 40. The drainage of the level was stopped with timberwork, and the water, which sometimes stood up as high as the walls, caused the decay of the timberwork. The drainage of the level was then cut off, and was introduced to the sea by means of a sluice, and the timberwork was removed. It was found that the decay of the timberwork was caused by the water being in contact with the timberwork. The timberwork was removed, and the level was drained by means of a sluice, and the water was introduced to the sea by means of a sluice.


[illegible]

Тысячи и др.

Infant's body buried in red of north wall; covered clay. All smoothed up.

January 1911.

Tomb II 57.

Shallow pit in sand, covered with small pebbles, etc. (see above). In some cases, the pebbles are
small, irregular, brown and greenish-brown. A common variety of pebbles is found which have
pale round pits, often from which a small cup or saucer is made, and with an incised
potter's mark (fragments): {  }.



Tomb E 4A.

A pit in the sand made by a conchoidal fracture.

$$T_{\text{eff}} = 1/(x)$$

Tomb II 59.

Unattached. A stepped stream bed, run out down to a straight line at water level (see fig. 7, east side). Soil the channel bed run been hollowed out.

Topic || no.

No traces of π -regioisomer were detected with GC/MS with m/z 100 and 102 as the most abundant ions. The whole peak of the π -regioisomer A had fallen in

In the clay, were numerous fragments of pottery, including some red-brown polychrome, possibly white-glazed ware.

In chapter A, we present a plan of the site, showing the location of the various buildings and the layout of the site. The plan is based on the archaeological excavations and the historical records. It shows the main buildings, including the temple, the palace, and the city walls. The plan also shows the location of the various streets and the layout of the city. The plan is a valuable tool for understanding the layout of the site and the location of the various buildings.

[illegible]

Tomb H 64.

No traces of superstructure. The shaft was 1.2 m. deep with corners at the west end rather slightly cut down. No sides or bottom.

In the tomb were a fragmentary jar, a fragmentary bowl, a fragmentary dish, one of carnelian and one of glass. (See also H 65, note H 65.)



Tomb H 64

Tomb H 65.

Rounded the top of the shaft was a small, low, superstructure at Tomb H 64. It was 1.2 m. high and 1.2 m. wide. The top of the structure was cut away leading to the inside of the shaft. The top of the structure was cut away leading to the inside of the shaft. The top of the structure was cut away leading to the inside of the shaft.

In the tomb were a fragmentary jar, a fragmentary bowl, a fragmentary dish, one of carnelian and one of glass. (See also H 65, note H 65.)

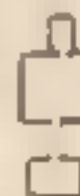


Tomb H 65

Tomb H 66.

No traces of superstructure. The shaft was 1.2 m. deep with corners at the west end rather slightly cut down. No sides or bottom.

In chamber A were found a fragmentary jar, a fragmentary bowl, a fragmentary dish, one of carnelian and one of glass. (See also H 65, note H 65.)



Tomb H 66

Tomb H 67.

No traces of superstructure. The shaft was 1.2 m. deep with corners at the west end rather slightly cut down. No sides or bottom.

In the tomb were found a fragmentary jar, a fragmentary bowl, a fragmentary dish, one of carnelian and one of glass. (See also H 65, note H 65.)

In chamber A were found a fragmentary jar, a fragmentary bowl, a fragmentary dish, one of carnelian and one of glass. (See also H 65, note H 65.)



Tomb H 67

In chamber B were found a fragmentary jar, a fragmentary bowl, a fragmentary dish, one of carnelian and one of glass. (See also H 65, note H 65.)

Tomb II 86.

Numbered Journal by the side of the foot
Half on the back, the hands & the nose

Body $\frac{1}{2}$ head north, extend tail on your left side, Look if as.

1000 H St.

Smolár (1994b) introduced a χ^2 -test for $H_0: \beta = 0$ against $H_1: \beta \neq 0$ based on the asymptotic normality of the maximum likelihood estimator of β . The test statistic is

Таблица 11.11.

[illegible]

Tomb H 80

Substrate Yarnak contained a body of water, but few small earthworms, and no visible fragments of a large *Leishilia* or *Strep. N. 2.1*, and two small *Strep. N. 2.1* (Fig. 4).

10000 11 90

By the order of the court, the defendant is to be committed to the custody of the sheriff of the county of ...

† 1954 11 12

Similar glassy, shd. crystals broad with sharp reflections and relatively sharp edges formed the $\text{PbO} \cdot 10\text{SiO}_2$ under a stream of blue-green red-white discharge rays.

தேவநாடு 11 04

Solving for $\mu(x, \sigma)$ yields $\mu(x, \sigma) = \frac{1}{\sigma} \ln \left(\frac{1}{1 - \sigma^2} \right) + \frac{1}{\sigma} \ln \left(\frac{1}{1 - \sigma^2} \right) + \frac{1}{\sigma} \ln \left(\frac{1}{1 - \sigma^2} \right) + \frac{1}{\sigma} \ln \left(\frac{1}{1 - \sigma^2} \right)$. Then solving for $\mu(x, \sigma)$ yields $\mu(x, \sigma) = \frac{1}{\sigma} \ln \left(\frac{1}{1 - \sigma^2} \right) + \frac{1}{\sigma} \ln \left(\frac{1}{1 - \sigma^2} \right) + \frac{1}{\sigma} \ln \left(\frac{1}{1 - \sigma^2} \right) + \frac{1}{\sigma} \ln \left(\frac{1}{1 - \sigma^2} \right)$.

Topic 11 Q3.

Similar grains, only head more rounded, as in the last, but the sides, 1 & 4, slip. *Length* 55. Body of an infant, head smooth. *Ala* 20, *antennae* 10, *ant* 10. *S* 10, rough red-bkly.

† 1991 11 24.

Similar grave, tools: 1. head with, extended, 1.5 m, the ear being the only, over the Tomb off as (one had been a plaster mask). 2. Head, 1.5 m, 1.5 m, some fragments remained.

Tomb H 94.

Similar grave, located 4.5 m. from the north entrance on the left side, the north by the axis, *Form II* around the neck, two strings of beads, one in green glaze (A) and light yellow (B) 34, and one of white and green glaze ring beads (A) 17.

Tomb 13 of

Similar to the bowl of small child, head north, extended to the right side, marked by the Tied II pin. There were three or four holes in the bowl. The neck was decorated with a brown disc and silver shell pendants attached to a cord. Below the neck, a set of small blue-green and white ring beads, round each wrist was a bead of red glass (see fig. 10-11) on the left and (perhaps from the wrist) a set of small round disc and ceramic beads.

CHAPTER XI

$$\text{eq. (4.6)} \quad \text{Dir. photo.} \quad \frac{1}{2} \hbar \omega = \frac{1}{2} \hbar \omega_0 + \frac{1}{2} \hbar \omega_1 + \frac{1}{2} \hbar \omega_2 + \dots$$
[illegible][illegible]

In the plate transmission experiment, the λ_{max} of the π - π^* absorption pattern of the compound (5) was 336 nm.

[illegible]

No trace of any openings here. The first door opened inward and the whole rock Tomb /
above was in no danger as I continued to follow it more & passed four toward the entrance
last by the door were four chambers covered and shaped as an oval bed, ten feet high, height 30 ft.
wide. Pl. 46.

Table 1

[illegible]

Tomb 1 10

[illegible]

Further down the page, under the heading "What's new," we are informed that the *Journal* has been selected for the 2006-2007 "Journal of the Year" award by the American Psychological Association. The *Journal* is also listed as one of the "Top 100 Journals" in the field of psychology by the American Psychological Association.

[illegible]

The effect of the presence of a common plant species on the effect of the first two tillage treatments on the second tillage treatment was also tested.

In the past, many people have been told that if they are confused by something, they should just "wait it out." But the good news is that there are many ways to help people understand what is going on. One of the best ways is to use simple, clear language. This means avoiding jargon and using words that are easy to understand. Another way is to use visual aids, such as diagrams or charts, to help people see what is going on. Finally, it is important to be patient and listen to what people have to say. This will help you understand their needs and provide the best possible help.

On the stage, the characters were seated in a circle, the actors' backs to the audience. Several men, one of which played Hamlet, and several women, all of whom were painted in blackface, sat in the circle, and the audience was seated in the front.



[illegible]

2000

Topic 1 24

Flower buds: No trace of receptacle, etc. Length of bud 2 mm. A single chamber at base. No contents except some fragments of a waxed but fragments of rough pottery fragments and some fragments of plant tissue, and one non-adult.



It appears that

Tomli 1 25

[illegible]

7. 444 2 1

Under this agreement, the two countries will exchange information on their foreign exchange reserves, capital flows and other economic data. The agreement also provides for the exchange of technical and statistical information. The agreement is a significant step towards the establishment of a free trade area between the two countries, which is a long-term goal of the two governments.



Tombs 1-36.

Dinosaur grave. No traces of other animals. Three chambers. Single chamber at west end large with no debris. Two smaller chambers. Contained only a broken skull and a few bones of a rough bodied fragment of a rough bodied pot and a lot of broken stoneware bowls. Layer A.



77

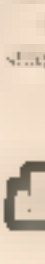
• 230

Tomb 137



Ashmoleps, however, the entire floor was made of the same material and the chamber of same width, which is the same as the other two. The floor was made of the same material as the other two. The floor was made of the same material as the other two. The floor was made of the same material as the other two.

Tomb 138



Shap. Tomb 138. The floor was made of the same material as the other two. The floor was made of the same material as the other two. The floor was made of the same material as the other two. The floor was made of the same material as the other two.

In the case of the tomb, the floor was made of the same material as the other two. The floor was made of the same material as the other two. The floor was made of the same material as the other two. The floor was made of the same material as the other two.

In the case of the tomb, the floor was made of the same material as the other two. The floor was made of the same material as the other two. The floor was made of the same material as the other two. The floor was made of the same material as the other two.

Tomb 139



Shap. Tomb 139. The floor was made of the same material as the other two. The floor was made of the same material as the other two. The floor was made of the same material as the other two. The floor was made of the same material as the other two.

In the case of the tomb, the floor was made of the same material as the other two. The floor was made of the same material as the other two. The floor was made of the same material as the other two. The floor was made of the same material as the other two.

No. 139. The floor was made of the same material as the other two. The floor was made of the same material as the other two. The floor was made of the same material as the other two. The floor was made of the same material as the other two.

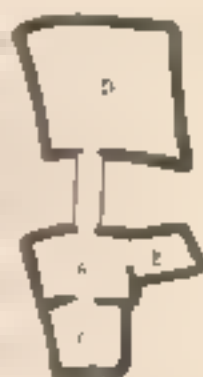
Shap. Tomb 139. The floor was made of the same material as the other two. The floor was made of the same material as the other two. The floor was made of the same material as the other two. The floor was made of the same material as the other two.

1. *Antennae*—11-segmented; 1st segment 1.5 times length of 2nd; 3rd segment 1.5 times length of 2nd; 4th segment 1.5 times length of 2nd; 5th segment 1.5 times length of 2nd; 6th segment 1.5 times length of 2nd; 7th segment 1.5 times length of 2nd; 8th segment 1.5 times length of 2nd; 9th segment 1.5 times length of 2nd; 10th segment 1.5 times length of 2nd; 11th segment 1.5 times length of 2nd.

Invols 140.

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In the last section, we have seen that the \mathcal{H}_∞ norm of a system is a measure of the worst-case gain of the system. In this section, we will see that the \mathcal{H}_2 norm of a system is a measure of the average gain of the system. The \mathcal{H}_2 norm of a system is defined as the square root of the trace of the product of the system's state covariance matrix and the system's output covariance matrix. The state covariance matrix is a measure of the average energy of the system's state, and the output covariance matrix is a measure of the average energy of the system's output. The \mathcal{H}_2 norm of a system is a measure of the average energy of the system's output, and it is a useful measure of the system's performance. The \mathcal{H}_2 norm of a system is a measure of the system's average gain, and it is a useful measure of the system's performance. The \mathcal{H}_2 norm of a system is a measure of the system's average gain, and it is a useful measure of the system's performance.

[illegible][illegible]

1. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

Touch [47]

Experiments conducted over the summer of 1992 and the winter of 1993 have shown that the *Chironomus tentans* is a highly effective bioindicator of water quality. It is a sensitive species that can tolerate a wide range of water quality conditions. It is a good indicator of water quality because it is a sensitive species that can tolerate a wide range of water quality conditions. It is a good indicator of water quality because it is a sensitive species that can tolerate a wide range of water quality conditions.


$$f = -4x^3, \quad f' = -12x^2$$


CHAPTER XII


INSCRIPTIONS FROM CEMETERIES H AND J

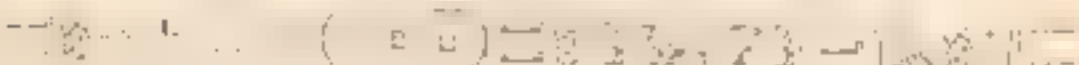
The number of funerary stela found in the graves at Bahari was very small. In part this may be due to the plundering which had taken place in recent times, but a more important explanation is suggested by the character of the figures and inscriptions on the few examples which were brought to light. The material seems inferior and the stucco very flimsy, not to mention the execution of the scenes is extremely crude and the language and style of the dedications are barbarous to the verge of illiteracy. We may assume therefore that few of the colonists in this frontier town had the time or the necessary education, and that the writing of epitaphs was a task only undertaken by a class of unusual taste or ambition. All the stela from cemeteries H and J were sent to the museum at Khartûm, and the translations of them which are given in this chapter, were made by Mr. A. M. Blackman from photographs and transcriptions.

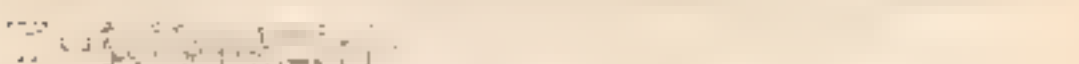
H. 4. A stela of stucco in three registers surmounted by four damaged horizontal lines of decoration.

The inscription of which the first line has perished is as follows:

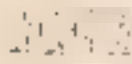
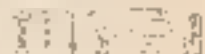
1. 

 2. 

 3. 

 4. 

In general sense: I send you good and precious offerings, everything good and pure in word and gesture for you, for the ka of the image of the king's table. *Kheper's ka, patron of the representative army, born of the earth of the great house, permanent, separating his.*

Below this is the last register, in stucco. Kheperka's stela and his wife Heli's  seated on chairs facing each other and smelling lotus flowers. They are attended by four female servants, on whom are named Wabsumert 

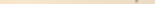
stands between them, whilst the other three are clustered close by the lady, whose hair is being dressed as she sits. And in the centre of the group stands beneath the great man's chair, and in dominating female figure, a corresponding place behind his wife's chair.

Beneath this scene is the sequel, together constituting four scenes, men and women (fronting to the left) with a girl, man, leading them, each of the four men holds the woman in front of him by the hand.

In the third register a series of seven 0's, 0000000, is followed by a series of five 0's, 00000, all floating to the left.

The names of the affected and value stored in the two lower registers are automatically written in to a non-volatile

17.4 At the top of a wall where $\theta = 0^\circ$, find the height h where


 The next step is to

Beneath the eye are four horizontal lines of orange, which extend

[illegible][illegible]

[The authors have drawn the results of this study to the attention of the

$$E_{\text{eff}} = \frac{\sum_{j=1}^n E_j}{n} = \frac{1}{n} \left(\sum_{j=1}^n E_j \right) = \frac{1}{n} \left(\sum_{j=1}^n E_j \right) = \dots$$

On the left side had been a corresponding tree which has perished. Beneath the horizontal suspension beam were standing the women. A group seated (facing to the left) and smilling a boy, whose which he holds in his right hand. Behind him stand two women, one of whom is also sitting. In front of him stand another woman, almost as small, seated. Behind her again a very small (?) figure of which only the head remains with some signs of dress.

Am
1. numbered
264

A stela of which the grave number has been lost in transit bears an inscription in seven lines as follows:

— } ————— } ————— } ————— } ————— } ————— } ————— }
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 ————— } ————— } ————— } ————— } ————— } ————— } ————— }

"An offering which thou knowest is
 Push south of his will, but
 beer, flesh, fruit, and
 the inspector of the king's table,
 His daughter,
 the judge attached to
 His son"

CHAPTER XIII

THE TWELFTH DYNASTY CEMETERY

The XII^d Dynasty graves were situated in a quite unexpected part of the site. We had been prepared to find them somewhere on the plateau near the New Empire cemeteries, or else further back in the western hill. But, when all this space had been explored without result, it seemed as though the limits of the Middle Empire colonnade must have been wholly obliterated by their successors, who recouped the site and who erected new middle groups of the ruins of the earlier houses and temples. This theory, however, proved to be unfounded, for on digging between the inner city and the New Empire fortification we found several rows of graves hewn in the rock edge of the plateau just outside the western galle wall of the older enclosure (see Plan C). The newly found cemetery was christened K, but to be an unassailable constant the same letter had been already given to seven graves, K + K₁, which do not belong to it. The XII^d Dynasty graves K 8-K 14 are all included, as Plan C shows, within the extent of the outer fortification, but K + K₁ lie outside at the eastern corner of the J cemetery. This is because the latter and satellites were assigned to K + K₁ before any digging had been done in the new walls, and at a time when it seemed as if these graves formed a separate group, distant enough from J to deserve a separate name. Eventually it was seen that in regard to position they could quite reasonably be regarded as an outlying corner of J, and though it is of course possible that they may have been originally constructed at an earlier period yet the seals and other datable objects in them were all of the New Empire. For the sake of convenience and to avoid risk of confusion the nomenclature K + K₁ has been retained, and the seven graves have been included with the K series in the Description of Finds and in the Catalogue of Objects; but it must be remembered that they do not properly form part of the K cemetery, which except for their quite heterogeneous date and character.

For the dating of K & K₁ the primary evidence of the written word is slight; but the secondary evidence, based on the character of the pottery and other objects, is fairly strong and is corroborated by other arguments. Only two inscribed objects were found which bore known and recognizable names. These were the gold ring with scarab-head in K 8 and the small glaze bead in K + K₁.

*Evidence for
Dating.*

of which were inscribed *Maat-en-eh*, the official name of King Amenemhat 3rd. No inscriptions and no scarabs were found of any New Empire king, nor was there a single piece of pottery of any of the well-known New Empire types; facts which are sufficient to convince any excavator of experience that the cemetery cannot belong to that date. On the other hand, the pottery and alabasters are perfectly consistent as a whole with the XIIIth Dynasty types, while some of the very commonest jars and bowls are not known to occur at any later time. The homogeneity of character, both in the construction of the graves and in their contents, is a strong argument in favour of the whole series being contemporary with K 8. And finally the position of the cemetery is in itself evidence of no small weight, for while it is quite usual to bury just outside the walls of a city it would be very exceptional in Egypt to bury within them; so that it is only reasonable to ascribe graves lying between the earlier and later walls to the inhabitants of the earlier colony.

*Type of
Cemetery.*

The construction and plan of the XIIIth Dynasty graves were no doubt determined partly by the nature of the ground in which they were made. We have already seen that in the New Empire two distinct styles were employed, according as the grave-makers were dealing with level plain or with precipitous hillside. In the one case they sank vertical shafts, and in the other they built horizontal passages to give entrance to the series of chambers in which they laid their dead. At Buhen the place selected by the Middle Empire colonists for their cemetery was a very low rock face like the rock-face below Gebel Turob, in which were [27-37] the domes, tombs, of the XVIIIth Dynasty (cf. pp. 116, 172-173). As the face was not high enough to allow of a direct horizontal approach such as could be used on an actual hillside like Gebel Turob (cf. [17] on Pl. 44), it was necessary to give the descent a downward slant to obtain sufficient vertical height for the entrance door and burial chamber. The passage therefore was begun on the natural ground level, several metres outside, and was carried down by a series of steps to a depth which varied according to circumstances, from a metre and three quarters to three or four metres. This characteristic is illustrated by the photographs on Pls. 71, 72, 73, 74, and by the sections of K 24, 27, 37 shown below (pp. 187-192).

Tomb K 8*Tomb K 8.*

The general arrangement of the subterranean chambers may be illustrated by the typical case of K 8, which is shown in the approved cut. The door at the end of the domes (Pl. 71) gave entrance to a large hall, lettered A, 1.6 m.

high. Round A were alcoves or side-chambers, which in this particular case Tomb K 1 were distributed with a certain degree of symmetry but more commonly followed no sort of system or alignment. There was no rule except convenience for their number or position. In K 8 the chambers were all on a uniform ground-level and the roads were all at the same height, but in other cases there was often a step up or down from one chamber to another and the roads were sometimes higher or lower (cf. K 10 in Pl. 17). Few graves were found intact, so that it is difficult to state how many persons they were intended to accommodate, but in several cases of which K 8 is one, a whole alcove was occupied by a single burial, though in others (cf. K 12, K 13, K 24) a number of persons, presumably paupers, were crowded side by side. Wooden coffins were often but not perhaps invariably used. The walls of the chambers were cut out of the soft sandstone with a sharp-pointed instrument, whether of stone or of metal it would be impossible to say.



Fig. 1. Plan of Tomb K 1.

There was no brickwork of any kind in the subterranean chambers, but even in the first tombs of the series remains of brick were noticed against the side-walls of the dromos and on the desert surface above the tomb.

Tomb K 12.

K 12 was the first case in which the remains were sufficiently complete to show that the dromos had originally been covered with a barrel vault of brickwork, and that a quadrangular brick chapel had also been built over the tomb. Superstructure and substructure were evidently quite independent of one another, the brick chapel being no direct continuation of the axial line of the dromos but not contemporaneous with the dromos or with any of the subterranean chambers. The appearance of the barrel vault and chapel can be appreciated from the photograph of K 12 in Pl. 16, while the annexed cut shows the relative positions of superstructure and substructure in the same



Fig. 2. Plan of Tomb K 12.

Fig. 3. Section of Tomb K 12.

Tomb K 12. The underground parts are ~~entirely in solid black~~ while the ~~dromos and chapel are shown in plan outline~~. It will be seen that the chapel, of which ~~several courses were preserved~~, covered the ~~doorway and part of the principal chamber~~, but that its walls did not coincide with the divisions of any of the face chamber. The dotted line ~~on each side of the dromos~~ indicates the ruined side walls which had ~~suffered the same~~. The actual tomb was not preserved in K 12 but can be studied in the ~~example~~ shown in Pl. 77.

In a group of tombs located at the northern end of the cemetery, and little disturbed by ancient planeters probably because they were known to contain no objects of value, the ~~superstructures~~ were remarkably well preserved. They are illustrated in Pl. 77, where two can be distinguished: viz. large grave-like ~~the standard type~~ which has not been described, and small ~~urn-like~~ tombs resembling those made by the modern Mohammedans. A good example of the larger is K 24 (see Pl. 78), very similar to it was K 23 which appears in the group on Pl. 77 and is shown in the accompanying plan and section.

Tomb K 24.

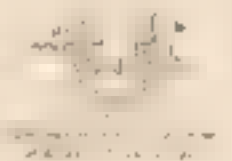
Tomb K 24. The roof of K 24 had ~~either~~ perhaps been broken through, but when the fallen bricks had been removed the ~~opening of the vault~~ was plainly visible, and it



could be seen that the ~~system~~ was exactly that of all the Nubian ~~burial-places~~ both ancient and modern. The ~~roof~~ of the vault could not be measured but was perhaps something like one meter from the springing to the apex. There was no chapel, but the whole superstructure formed a single block which covered the dromos and the door leading from it into the burial-chamber but did not extend further. In the cut on the west wall of the superstructure, ~~so the removal of the vaulting bricks of the doorway by which the dromos itself was entered~~ from the center of the ceiling of rough bricks which closed this doorway. The character of doorway and of ceiling can be understood from the photograph of the neighbouring tomb K 23 in Pl. 78. On the right in the same picture may be seen the northeast corner of K 24 with the peculiar brick offering-stand in front of it.

Tomb K 25.

K 25 differed from K 24 in two respects. The superstructure extended at the west end two metres beyond the end of the shrine, and thus overlapped the space above the burial chambers. It may be compared in this respect with K 26, though it should be noted that in K 26 the chapel, if chapel it could be called, was not distinct from the dromos but formed an undivided continuous line with it (see Pl. 75). The second point to note is the brick court in front of the tomb, which may well have been a separate but had not survived in any of the plans of K 25 (see Pl. 84). In the east which illustrates the superstructure of K 25 the shafts of pits or burials of the same kind as the doorways, though well set, the vaults and the niches below on the east side of the dromos are distinct and separated by lintels. The brick walls and lower part of the dromos are also distinct, thus with the shafts of the niches and the niches but half a metre away. In the case of the niches and shafts for in K 24 and K 26 the brick walls were set directly from each edge of the pit, while in K 25 the shaft wall was flush with the pit but the northern was not.



Tomb K 27.

K 27, which appears on the right side of the lower photograph in Pl. 27, like K 25 was less perfect than K 24 but seemed to resemble it in every respect. K 27, however, was a new type as viewed from the outside with chambers descending one below the other. The two niches at the end of the kind in the cemetery. One of the doorways leading from the dromos into the first chamber was the inscribed and still in position. There was the only example which it was round, though in K 24 there was an arched niche over the door which had evidently been intended for the purpose.



At the southern end of the cemetery were several very large tombs of which the superstructures were partly preserved. K 13 and K 28, which are shown in the photograph in Pl. 79, were of the same type as those which have just been described, and so was K 29, which is not illustrated. In K 13, however, there was one new feature which occurred again in K 27: namely, that the pit was divided into two parts by a brick barrier,

Tomb K 27. In this case moreover there was a stone portcullis on the top of the barrier; and the portcullis rested on a stone pavement, which may perhaps have been carried as a flooring over the whole length of the dromos so as to form a chamber over the pit itself (see Pl. 79).

Tomb K 37.

Tomb K 37. K 37 was the most elaborate and perfectly preserved of all the large tombs in the cemetery. The photographs on Pl. 82 and the plan and section given in the



accompanying cut will explain its construction. The superstructure covered only the dromos and ended above the door of the first chamber. Just behind its rear wall, however, a thin curved wall was constructed, no doubt to keep off the drifting sand. This wall is marked in the cut as *a*, while the west wall of the vault is *b*, the line of springing of the vault is *c*, and the doorway by which the dromos was entered on the east is *e*. It will be observed that there is a sort of vestibule of brick extending for two metres in front of this door. The sarcophagus was divided into two halves by a brick barrier, lettered *d* in the

cut, which is plainly visible in the photograph.

*Pillars beside
K 37 and
K 38.*

At the west end of K 37 are five brick pillars, three on the south and two on the north, which appear in the upper photograph on Pl. 82. No less than ten of these pillars surrounded tomb K 38, and are shown, lettered P 1 to P 10, in Pl. 83 and 84. They are not plain like the brick offering-stand referred to in the account of K 24 but have a square recess in the middle of the front, with a triangular niche beneath. One of them had also a basin in mud plaster below the niche. They must evidently have been intended for the reception of offerings, food and drink, brought for the worshipper and relatives of the deceased when they periodically visited his tomb.

Tomb K 38.

K 38 (see Pl. 85) is interesting as showing the remains of an outer court. The angle of wall standing at the southeast corner of the dromos suggests that there may also have been an inner enclosure closely surrounding the tomb. This feature should be compared with the incomplete walls of the "chapel" in K 13 (see p. 187), which may perhaps have continued originally round the entire dromos

though it looked rather as if they had returned at right angles half way Tomb K 14, along it.

The more type of large tomb, quite unlike the others, is represented by a single Tomb K 44, example in the whole cemetery. This is K 44, which is illustrated by two photographs on Pl. 84 and one on Pl. 85. It had no dome or shaft, but was a plain rectangular chamber five metres long, built of brick inside a pit which was excavated partly out of rubble, partly out of alluvial deposit. The pit had been vaulted over its whole length, and was originally entered from the east by an arched doorway, which was sealed after use with roughly piled bricks in the usual manner.

Tomb K 19.

The small surface tombs referred to on p. 188 are illustrated on Pl. 77, ^{Small surface} _{tombs} 81, 82. Those in the northern group K 19-K 23 are rather simpler and poorer than the southern examples K 37-K 41 but of the same general type. Each contained only a single body, which in several cases, but not always, was that of an infant. Virtually no objects were buried in these graves, which were evidently regarded as comparatively unimportant. The body was laid in a narrow trench, over which was erected a low brick structure of one metre or a little less in height and flat-topped. The roof was supported by bricks sloped against one another in imitation of the vaulting used in larger constructions, but real arching was not employed as the space to be covered was too small to mask it. The cut of K 19 shows a typical ground plan and section. This grave contained the body of an adult, extended at full length with the head at the west end. Similarly K 22 and K 23 contained each the body of an adult, but K 20, 21, 24 were the graves of children. The triangular niches on the east face are like the niches on the offering-pollars and were no doubt used in the same way.

K 20, K 22, K 23 are well shown in the photographs on Pl. 83, 82; K 24, ^{Tombs} _{K 20-K 22,} was of the same kind but much ruined.

These are better built, and K 24 has a small square window on its eastern face above the niche. The form of tomb recalls that of the coffins which so often figure in Egyptian pictures and also resembles that of modern Mohammedan tombs in various parts of the country.

The only other class of burial to be recorded from the cemetery is that of the infants who were sometimes put under large pots against the sides of larger tombs.

CHAPTER XIV

CONTENTS OF THE TWELFTH DYNASTY TOMBS

*Plundering
in Ancient
Times*

With very few exceptions the graves in cemetery K had been rifled in ancient days. Those that had been deliberately left intact were, as usually happens, the burials of paupers; and it is evident that the tomb-robbers knew very well which graves contained valuable objects and which were not worth plundering. In three cases, however, K 5, K 12, K 24, a fortunate accident had balked the unprincipled thieves. The thin layer of sandstone which formed the roof was so weak that it had collapsed, covering the bodies and the various precious objects buried beside them with a mass of heavy debris which could not be removed without much labour. When we broke up the stones, therefore, and removed them, the complete tomb equipment was lying untouched exactly as it was first placed there four thousand years ago.

*Treasures in
K 2*

The open chamber in K 2 which was unplundered contained veritable treasure, the complete set of jewellery which is figured in the frontispiece of the volume. The tomb itself is illustrated on Pl. 72 and 73, while the contents of this unplundered chamber are shown on Pl. 74 lying exactly as they were found. Round the neck of the man, to whom perhaps it had been given as a reward of merit by the king, was the great necklace of gold and amethyst one metre long, and a string of plain gold beads; on each of his arms was a gold bracelet; and on a finger of his left hand the gold ring with its scaraboid set inlaid with the name of Mentemhotep. On the left shoulder, where it had perhaps fallen from its original position on the chest, rested a glazed steatite plaque inscribed on both sides with the title of the king. See for descriptions, pp. 102, 103 and Cat. 12731-12738.

A few feet away in an adjoining chamber was the incomplete string of gold amulets in the shape of Hathor-heads and of gold hawks, which is also figured in the frontispiece. It must remain uncertain whether it originally belonged to the same burial as the rest of the jewellery or whether, as seems more likely, it was the only salvage from another treasure near it (Cat. 12732).

Close to these last was lying the steatite statuette which is figured in Pl. 72, 73. It is inscribed very simply with a dedication to Ptah and the name

of "the gardener Merer, born of the lady of the house Neferu." It is tempting to suppose that the statuette represented the very person whose jewellery we found; but there can be no certainty on the point, and it must be admitted to be at least equally probable that it originally stood in one of the other chambers. However this may be, it is certainly interesting to note that a simple retainer, apparently without any special titles or rank, was buried in a division of so fine a tomb which must have belonged, we should suppose, to one of the principal families of Bubastis.

Little less gorgeous than the jewellery of K 5 were the necklaces and bracelets found in K 12 and illustrated on Pl. 51. The latter, however, formed the equipment of several persons. The gold and amethyst necklace (1821), which resembles that of K 5 but is shorter and much less perfect in colour, was with the necklace of plain gold beads (1822) and two bracelets of plain gold beads (1823) and (1824) on one body. On another was the necklace of plain gold beads (1825), while the fragment of a third string bracelet (1826) was found with a third body, that of an infant. All these were in the principal chamber of the tomb. The other bracelet of gold beads (1827) was lay one of four i-besets buried together in a sub-chamber. (See for description, pp. 217-220 and Catalogue.*)

In another sub-chamber of K 12 was the most interesting archaeological specimen discovered in the entire excavations. This is an iron spear-head which, at we are right in our dating of these tombs, is the earliest iron implement known in the history of the world. It is now on exhibition in the University Museum, Philadelphia (Cat. 10000) and is figured on Pl. 52. It measures 0.9 m. in total length by 0.5 m. maximum width, is quite perfect and a very fine example of primitive smithwork, such as might have been produced by the natives of Central Africa at any time up to the present day. The full account of its discovery is given in the description of the tomb on p. 221. It is evident that as the entire tomb was intact, and the skeleton with which the spear was found lay actually in the furthest chamber of all behind a whole group of bodies which were also undisturbed, the spear does not belong to any retainer but must be contemporary with the tomb. The only question can be whether the tomb itself is as ancient as we have suggested. In the last chapter we have given our general reasons for ascribing the entire cemetery to the XII^d Dynasty, and K 12 is as thoroughly typical a tomb as any in the whole series. The detailed description of its contents in Chapter XV when compared with the detailed

* The whole of the jewellery of K 4 and K 12, as well as the iron spear-head, were in a case in the University Museum of Philadelphia, was stolen from the museum in March 1911 and has not been recovered at the date when this goes to press.

The Earliest
Iron
Implement

descriptions of other tombs in the same chapter, especially with that of K 8 which is indisputably XIIth Dynasty, should be sufficient to convince the reader.

It has long been suggested that iron-working originated not in Asia Minor, but in Central Africa, and this discovery goes far towards establishing the truth of that theory. On Pl. 86 is shown a photograph of the skeleton lying in position with the spear beside its skull. With it was a bronze mirror (1873).

Contents of
K 45

The third tomb, K 45, also contained gold objects, namely, two strings of beads and several amulets (1892-4, Pl. 89). Of less intrinsic value but very interesting were beads and small amulets of carnelian and of glass (1898-8). A silver torque the ends of which were moulded in the form of snake heads (1896, Pl. 91) is the third example of elaborate silver-work found at Buhen (cf. p. 146) and suggests that this metal could be more easily obtained there than in most Egyptian towns. The obsidian kohl-pot found in gold (1897, Pl. 91) is a very precious object for, though obsidian is found in Egyptian graves of every date, it was always a rare and valuable material probably imported from a distant source in the Mediterranean. The substance is brittle and hard, so that it taxed the abilities of the carver to the utmost, and the fine cutting of this little vase makes it a gem of art. In the same tomb were also found part of a very fine bronze bowl (1885, Pl. 92), two bronze mirrors (1881 and 1882), a bronze axe-head (1882, Pl. 93), several small alabaster vases, a carved ivory amulet (1874, Pl. 89), and a number of Talled Yahudieh vases which will be discussed in the section on pottery.

Medit and
Culture of
Buhen

The equipment of these tombs which are only an insignificant fraction of the whole cemetery, suggests that there was much wealth and luxury among the inhabitants of what might at first sight have been considered an unimportant frontier town. It is evident that the colonies of remote Buhen were fully as civilized and art-loving as their countrymen who dwelt nearer to the chief centres of Egyptian culture. Their jewellery and ornaments, their weapons and implements, are not inferior to any of the same period which have been found in the northern and central districts of Egypt. Of the quality of their sculpture we can judge from the statuette of Merer as well as from the exquisite New Empire figure of the scribe Amenhotep. Of architecture under the Middle Empire no examples remain, as the temples of that period were all destroyed, but in the XVIIIth Dynasty Hatshepsut's building was a monument of unsurpassed beauty and excellence.

Absence of
Records

One thing only was wanting and the historian feels its loss. We shall never know the names of the great families of Buhen nor the achievements of any

notable men who lived and died there, because, though there were scribes in plenty, there was no one who had the art or knowledge to compose and execute biographical inscriptions. Only three inscribed stelae were found among all the graves of the XIIth Dynasty. One of these was too weather-worn to be legible (K 27), another was a rough scrawl without any name (K 22), and the third (K 26), contains only four lines of dedication with the mere names of the deceased and of his mother. And yet there must have been important persons, though perhaps few in number, who lived here from the very foundation of the city. The shrine of Horus was widely revered and the priests who served it would have enjoyed high honour, the strategical value of the fortress at the entrance of the cataract made indispensable a military commander of rank and ability; and tombs so elaborate as those which we have described must have belonged to men of wealth and perhaps of noble family. But they have left no records and we can only infer some little about their lives from the chance salvage of these three tombs. Little has survived from the wreckage of the others; the scintillae are figured on Pl. 50, the stone vessels on Pl. 51; only the pottery demands detailed notice.

If we compare the pottery of cemetery K as illustrated on Pl. 44-55 with that of H and J as illustrated on Pl. 15-30, some notable differences are apparent. The poverty of the K series and its small range of types are very striking. There are few classes of ware and still fewer forms of outline. Apart from the Tell-el-Yahudiya vases which are common to both periods, there are no handled vessels except Type viii in any of the K groups; the characteristic XVIIIth Dynasty shapes S xxxi to S xl are entirely absent, there are no painted jars, no Mycenaean *lugelkannen*, no pyramidal bottles.

It is less easy to pick out examples which are peculiar to the E period than to demonstrate its poverty in ceramics. The group on Pl. 44 is the most typical that could be selected. The ware is the common rough red-brown, common in all periods from the predynastic to the XIIth Dynasty and occurring in the New Empire, but much less frequent than as it was widely replaced at that time by a smoother fabric. The wheel was in general use among the Egyptian though not among the Nubian potters, and it is to be observed that even the rough pottery of Buhen is wheel-made. The large coarse bowls of Type ii, often ornamented with a string-pattern made by tying palm cords on the wet clay, were not found in H and J and may be regarded as distinctively Middle Empire. Type iii also seems to occur only in K. Type i, which was very frequent in K, was found only once or twice in H and J. On Pl. 45 Type xxx is a form

Результаты

well known in the early Middle Empire and not apparently found after the XIIth Dynasty; it is of rough red-brown ware. These are the most distinctly characteristic of the K. ware, though it must be noted that Type xxx is rare. The very common XVIIIth Dynasty shapes S. xx, S. xxi, S. xxx are entirely absent from K. A few kinds of jars and bowls are common to both periods.

The fabrics we have been sand, are then. The component is the simple rough red brown ware without any wash or slip. Almost equally frequent is the same ware slightly washed with hematite. A less common variety of this has a strong hematitic slip. The rare hard white ware represented by Type viii (No. 589) is very rare. I think the coarsest variety of Type x (No. 592) has a light white slip. Type ix is a thick topped hematitic ware, the only example of this fabric found in the E. cemetery and interesting in showing that the native Nubian pottery was occasionally used.*

The reverse of Type iv and Type v could be noticed in similar pottery shards have often been described, probably quite correctly as "ribbed." These particular specimens show the marks of the very plainly. Type vi looks like the earliest example of a candlestick, but it is not known that the Egyptians ever used candlesticks.

The pieces are figured in the cases of Talled Yahudieh type, six of which came from the single tomb E 42. They were all being discarded on p. 140, and several XIIIth Egyptian examples have been figured in Pl. 17. They found in all three cemeteries. The pectorals on Pl. 17 are of special interest, as only two of them, namely nos. 1 and 2, are of the usual black pectorated ware. Nos. 3 and 4 are plain black ware, undecorated. Nos. 5 and 6 are of a red ware, the last of finely finished lustrous red ware; nos. 7 and 8 of degenerated white ware; nos. 9 and 10 of rose pink ware, decorated with painted lines.

* We have also considered the possibility of a more general, non-linear, but still first-order, hopping profile. For example, we have considered the possibility of a profile of the form $\alpha \exp(\beta x)$, where α and β are constants. However, we found that such a profile does not lead to a stable solution for the field $\mathcal{H}(0,0)$.

three of S ax or xxi, wares of S xii, two of S xxii, vii, 10727 and 10728, two ring-stands, Tomb K 5 one of which is 10719, another ring-stand in micaceous ware 10729 & a jar like S xlii but larger. Also two large disks of rough ware, at least of red-tinted brown ware, the base of a pottery table or incense burner in rough ware, and some other plain reddishware 10710.

The upper photograph in Pl. 50 shows the entrance of the first or eastern chamber, with the empty coffin-pit C on the left and the opening of chamber A behind it. On the right is the coffin-pit B with its upper intermediate position. For a full view of the top of the coffin-pit, that necessary on a level by it with the floor of the chamber, cf. Pl. A, see a sketch as extended to full length with its head at the west. The pots with the necks of which appear in the photographs were 10726, one of S xvi, one of S xii, one of S xvi, four from plates of S xvi, 2 of rough ware, and a red-tinted bowl of brown ware. About the place of the top were several small pots, viz. eight ware-lamp-glazes, 10711, red-blue ware (shabbi) 10712, three blue-glaze vessels, 10713, two fine green-glaze minims, 10714, a red-glaze vessel, 10715. Near the head was a small green-glaze jarab, 10716.

The remains of the skeleton and the objects with it from the top level of B, another skeleton was found in the basement of the coffin-pit. It was small and long extended with its head at the east. The only objects with it were six small pots, such as were found in any of the New Empire graves, and fragments of a unique vase, 10725, of glazed Argos ware, which were actually underneath the skeleton. The pots were three hemispherical bowls and a small oblong red ware, a bowl of red-tinted brown ware, and a micaceous brown bowl narrow and with ring base, part of a large water jar in rough red ware. The Argos pot is described on p. 172 and figured in Pl. 10. The skeleton was a male that the skeleton dated from the XIIth Dynasty was made because the tomb, being in the K group, was at first regarded as contemporary with K 54. It was now evident, however, that it belongs to the separate group K 17, the period of which is New Empire, cf. p. 175.



Tomb K 6.

Tomb K 6.

K 6 was a stone grave, the entrance of which descended by eight steps to a depth of 1.40 m. below the ground. From the threshold of the door another step led into the principal chamber A which was 1.40 m. in height. The chamber B behind this was 0.95 m. in height. The tomb was empty except for the scattered bones of several skeletons.

Tomb K 7.

K 7, which lay some distance northwest of the last, belongs both by position and by character rather to the J than to the K group. Hanging on the plateau and not against the slope it was a shaft tomb with a vertical pit 4.50 m. deep instead of a 1.50 m.

The principal chamber A was 1.40 m. high, 1.40 m. in length, B and C were 1.40 m. in height, D and E were 1.40 m. in height, F and G were 0.95 m. in height. The shaft was found on the south wall, the entrance of an additional chamber and some passages, all came from A. There were the usual objects, viz. 10717, 10718, 10719, 10720, 10721, 10722, 10723, 10724, 10725, 10726, 10727, 10728, 10729, 10730, 10731, 10732, 10733, 10734, 10735, 10736, 10737, 10738, 10739, 10740, 10741, 10742, 10743, 10744, 10745, 10746, 10747, 10748, 10749, 10750, 10751, 10752, 10753, 10754, 10755, 10756, 10757, 10758, 10759, 10760, 10761, 10762, 10763, 10764, 10765, 10766, 10767, 10768, 10769, 10770, 10771, 10772, 10773, 10774, 10775, 10776, 10777, 10778, 10779, 10780, 10781, 10782, 10783, 10784, 10785, 10786, 10787, 10788, 10789, 10790, 10791, 10792, 10793, 10794, 10795, 10796, 10797, 10798, 10799, 10800, 10801, 10802, 10803, 10804, 10805, 10806, 10807, 10808, 10809, 10810, 10811, 10812, 10813, 10814, 10815, 10816, 10817, 10818, 10819, 10820, 10821, 10822, 10823, 10824, 10825, 10826, 10827, 10828, 10829, 10830, 10831, 10832, 10833, 10834, 10835, 10836, 10837, 10838, 10839, 10840, 10841, 10842, 10843, 10844, 10845, 10846, 10847, 10848, 10849, 10850, 10851, 10852, 10853, 10854, 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limb near the neck or, more probably, passed round it. From the neck one side passed along the body and under the right upper arm, and the other apparently passed under the left arm in the same way, but the condition of the bones made this point uncertain.

On the face there had been a shield-shaped plaque with painted top of the head often noted in graves at Hohen, and said to be gold. By the side of the head was a green-glazed steeple-shaped, 10 cm. high, vase with a 10 cm. diameter, which had probably been on the head and been displaced by the filling of the grave. It was a cracked, light-colored ware, the base of which had doubtless projected from the top of the head. The vase appears broken in the lower photograph of Pl. 77, examination of the top of the vase while the upper photograph of the same plate reproduces the two sides of the inscription.

On each of the fore arms of the head there were a bracelet made of two strands of gold wire (one of the middle fingers was a lower arm) and a pair of the bracelets of which were one on each arm, to be exact. Above the lower arm was a pectoral, the central part of which was a ring, upper of gold wire with a round, white, cracked stone in the center, as the head. The stone which was greenish-brown was encased with a gold wire. Below the pectoral was a gold ring. The pectoral and ring were found in the same position as the head, and were the first to be found.

Around the mouth of the head were four small, round, red-brown, ware with a slight lustrous finish, one of which was a small, round, red-brown, ware. In the pit below the head were a fragment of a stoneware bowl, a small, round, red-brown, ware, and a small, round, red-brown, ware.

In Chamber A at the bottom of the pit were the remains of a small, round, red-brown, ware, one of which was a small, round, red-brown, ware, and a small, round, red-brown, ware. It is possible that they had been put in the same position as the head, and were the first to be found.

Just at the bottom of the pit were the remains of a small, round, red-brown, ware, one of which was a small, round, red-brown, ware, and a small, round, red-brown, ware. It is possible that they had been put in the same position as the head, and were the first to be found.

At the bottom of the pit were the remains of a small, round, red-brown, ware, one of which was a small, round, red-brown, ware, and a small, round, red-brown, ware. It is possible that they had been put in the same position as the head, and were the first to be found.

At the bottom of the pit were the remains of a small, round, red-brown, ware, one of which was a small, round, red-brown, ware, and a small, round, red-brown, ware. It is possible that they had been put in the same position as the head, and were the first to be found.

In the entrance of the pit were the remains of a small, round, red-brown, ware, one of which was a small, round, red-brown, ware, and a small, round, red-brown, ware. It is possible that they had been put in the same position as the head, and were the first to be found.

In the entrance of the pit were the remains of a small, round, red-brown, ware, one of which was a small, round, red-brown, ware, and a small, round, red-brown, ware. It is possible that they had been put in the same position as the head, and were the first to be found.

Tomb K 9.

The entrance descended by five steps to a depth of 1.70 m. below the surface of the ground. Two more steps each 0.10 m. deep led through the doorway into a first chamber, which was 1.30 m.

Tomb K 12. Slices of tough red-brown ware and a ring-shaped gold-beaten ware washed with hematite, 6 cm. in height by 6.15 cm. in diameter. In the drum was the pot, 10716, of Type 22V, Pl. 95, and some ring-shaped shell beads, 10714.

Tomb K 13.

Tomb K 13. The approach to K 13 was a pit rather than a tunnel. It had been stepped and sunk vertically into the ground on two levels, the upper of which 2.5 m. long was 1.5 m. deep, while the western part, long 2.5 m., was 1 m. deep. The entire pit had been vaulted over.



A doorway, 1.5 m. high, led north to a deeper room, deeper than which. At the corner of the doorway was a 1.5 m. deep. This room was vaulted over. It was 1.5 m. long, 1.5 m. wide, and 1.5 m. high. The doorway led to a smaller chamber, 'C' and 'D' were 2.5 m. long, 1.5 m. wide, and 1.5 m. high.

In 'A' were a number of objects, including a large bowl, some of which were of red ware, and some of which were of gold. There were also some small objects, including a small bowl, and some small objects, including a small bowl.

There were also some small objects, including a small bowl, and some small objects, including a small bowl. There were also some small objects, including a small bowl, and some small objects, including a small bowl. There were also some small objects, including a small bowl, and some small objects, including a small bowl.

On the north wall of 'A' were a number of objects, including a large bowl, some of which were of red ware, and some of which were of gold. There were also some small objects, including a small bowl, and some small objects, including a small bowl.

In 'B' were a number of objects, including a large bowl, some of which were of red ware, and some of which were of gold. There were also some small objects, including a small bowl, and some small objects, including a small bowl.

The pottery, including a large bowl, some of which were of red ware, and some of which were of gold. There were also some small objects, including a small bowl, and some small objects, including a small bowl.

Tomb K 14.

Tomb K 14.



K 14 was a small tomb, 1.5 m. long, 1.5 m. wide, and 1.5 m. high. It was vaulted over. The doorway led to a smaller chamber, 'C' and 'D' were 2.5 m. long, 1.5 m. wide, and 1.5 m. high. The doorway led to a smaller chamber, 'C' and 'D' were 2.5 m. long, 1.5 m. wide, and 1.5 m. high. The doorway led to a smaller chamber, 'C' and 'D' were 2.5 m. long, 1.5 m. wide, and 1.5 m. high.

Tomb K 15.

K 15 was a small tomb, 1.5 m. long, 1.5 m. wide, and 1.5 m. high. It was vaulted over. The doorway led to a smaller chamber, 'C' and 'D' were 2.5 m. long, 1.5 m. wide, and 1.5 m. high. The doorway led to a smaller chamber, 'C' and 'D' were 2.5 m. long, 1.5 m. wide, and 1.5 m. high.

Tomb K 15.

Scale 1:10.

Tomb K 16.

K 16 was a diamond-shaped, double-regular XIIth Dynasty chamber, four steps leading down from Tomb K 10 to a depth of 1 palm, and giving entrance to a large chamber A, 60 which opened six smaller chambers, two on each side. The tomb-chapel was plundered out completely and re-used for Khatam Nubian burials. The only XIIth Dynasty remains were a part of Teye Khep, a fragment of K 16, a few amethyst beads, three small blue glass beads, and a fragment of a gold ring.

In the dromes were one or two round & Hagenian-Nubian pottery with a pattern of black, white, orange and red ground. In A some green lozenges extended at full length on the top of the tablets which belonged to the earlier incense. Three of these lay with their heads at the west, one with its head at the east, two with their heads at the south, and one with its head at the north. With them were also a pair of red lozenges, Hagenian types, two hemispherical basins, and a small, a few inches in diameter, bowl. In the larger basket were a small, and a larger, and a rough flint knife, in the smaller round basket were a few small, and a number of wicker and wood. Also in the tablet of the Sarcophagi, a broken Amu-

In U there were two *Stenocranus* birds and a male. One of the *Stenocranus* was in the exaggerated position (facing up), left side with head extended into the air; the other was extended at full length and had most of a second feather shed.

The Monks' Seal, a step, which could not be traced, consisted of two plain unsanded amphora E 1a, a number of four, three complete and one of E 1a plain, 1' 1, 1' bi, 1' li, 1' li, all plain, some long and slender, some plain, some decorated. From around which was black incense with a leaf pattern and a vase, the other was red with three black bands.



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Դժնի Խ 17.

A roughly cut, staircase two meters deep, led down to a depth of 1.5 m below the ground (Fig. 17). The clear water was 1 m high and a steeply sloped descent throughout the thickness of A. Another steep descent deep marked the passage from A to B. The length of A was 1.5 m. That of B was 1.5 m.

In the drama, were six boxes of life-size figures, two of which are catalogued as Egyptian, left of a portrait, and a statue, and a standing figure. In A there were two gods with life-size figures with their heads at the west. No other figures, and few pieces of furniture, including:

In D there were two large skeletons, both with long, thin tails. No. 5 was male. No. 4 was a young female. No. 4 had been killed near the south. No. 5 was with their heads at the north. With the bones of the animal that was a brown color, caught by a wire, fragment and a brown, like a young pig which had been killed been part of its food. At the head of No. 5 were a pair of bones, a pair of bones, diameter 10 cm. and 1 cm. all part of the same animal. The only part was a large dish of Type A. In both chambers there were fragments of wooden vessels and of plaster nails. In the rubbish was the late square cup.



4.1 135

Temple K 18.

K 16 was a very simple tooth. The incisor had no roots and was horizontal to the surface of the surrounding ground, but as the slope in which the tooth had been taken was heterogeneous there was sufficient height for it without any descent. The bottom of the door was 1 inch below the ground, the door was 1 cm high and the thickness of the natural rock wall of the chamber approximately 0.5 cm. There were traces still visible of the block wall which had covered the incisor.



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2. \mathbb{R}^n is a vector space over \mathbb{R} .

Tomb K 20.

A dromedary 4.0 m. long, enclosed by brick walls 6.0 m. high which no doubt once supported a vault, led down to a roughly-hewn chamber 1.0 m. below the surface of the ground. This tomb was apparently never finished - on the southeast and west sides, which were the best oriented, were niches as if chambers had been begun and abandoned. (Not whether there were three pairs, viz. 10817, 11191, 11192 in rough red-brown ware - a large shallow bowl in rough red-brown ware and a small shallow bowl in red-brown ware filled with incense-sticks. Among the south side on a wooden coffin was the skeleton of a woman, entire of full length, with head at west. A little to the right of the head, 0.40 m. high, within the tomb this burial was, have been of later date.

Tomb K 91.

A tenth of the usual type with diagonal main chamber and one sub-chamber on the south *Trans. p.* side. In the principal chamber were four holes, two of which were somewhat considerable, being extended. Three of them lay east and west with the fourth at the west end, the fourth lay north and south with one head at the south. In the side of chamber were two holes, one north and south with their heads at the north.

The only objects in the totals were a fragment of a *Proteridion* of Type 1, and a petioled line; Type 1 but twice as wide though marginally flattened; 4 or not in red-brown, was covered with a wash of haemate.

Tomb K 11.

A diurnal five metres long chert column in the east of Figure 3, a series of much deeper (and N. of) depth of two metres below the ground. From the column a small, thin, pale, irregularly shaped principal clasper A which was quite high with a long, thin, curved, and a small, dark, black left in the centre.

[illegible]

On the north side of the river there were three islands, each with a small pond. Our boats on the north side were skirting rapids and were within 100 yd of the western end of the island between the north and south rapids. The

[illegible]

In chapter 34 the most western and the most eastern of the three bodies were female, the central was too broken to admit of sex. As the head of the most eastern was a broken lump of



show the original points. From the east, a pair of feet, the toes straight and connected at the junctions, Tomb K 27
 and arching to the instep, extended N. 10° E. 100° and 110° to the west and southeast of the toes and the
 third of green, light, rectangular and light, set, which had been broken, were distributed. A
 number of very small, white, shell, and light, set, which had been broken, were distributed. A
 number of very small, white, shell, and light, set, which had been broken, were distributed. A
 number of very small, white, shell, and light, set, which had been broken, were distributed.

Above the head of No. 1, a pair of feet, the toes straight and connected at the junctions, Tomb K 27
 and arching to the instep, extended N. 10° E. 100° and 110° to the west and southeast of the toes and the
 third of green, light, rectangular and light, set, which had been broken, were distributed. A
 number of very small, white, shell, and light, set, which had been broken, were distributed. A
 number of very small, white, shell, and light, set, which had been broken, were distributed.

In the middle of the feet, a pair of feet, the toes straight and connected at the junctions, Tomb K 27
 and arching to the instep, extended N. 10° E. 100° and 110° to the west and southeast of the toes and the
 third of green, light, rectangular and light, set, which had been broken, were distributed. A
 number of very small, white, shell, and light, set, which had been broken, were distributed.

In the middle of the feet, a pair of feet, the toes straight and connected at the junctions, Tomb K 27
 and arching to the instep, extended N. 10° E. 100° and 110° to the west and southeast of the toes and the
 third of green, light, rectangular and light, set, which had been broken, were distributed. A
 number of very small, white, shell, and light, set, which had been broken, were distributed.

The feet of the feet, a pair of feet, the toes straight and connected at the junctions, Tomb K 27
 and arching to the instep, extended N. 10° E. 100° and 110° to the west and southeast of the toes and the
 third of green, light, rectangular and light, set, which had been broken, were distributed. A
 number of very small, white, shell, and light, set, which had been broken, were distributed. A
 number of very small, white, shell, and light, set, which had been broken, were distributed.

The feet of the feet, a pair of feet, the toes straight and connected at the junctions, Tomb K 27
 and arching to the instep, extended N. 10° E. 100° and 110° to the west and southeast of the toes and the
 third of green, light, rectangular and light, set, which had been broken, were distributed. A
 number of very small, white, shell, and light, set, which had been broken, were distributed. A
 number of very small, white, shell, and light, set, which had been broken, were distributed.

The feet of the feet, a pair of feet, the toes straight and connected at the junctions, Tomb K 27
 and arching to the instep, extended N. 10° E. 100° and 110° to the west and southeast of the toes and the
 third of green, light, rectangular and light, set, which had been broken, were distributed. A
 number of very small, white, shell, and light, set, which had been broken, were distributed. A
 number of very small, white, shell, and light, set, which had been broken, were distributed.

Tomb K 31.

K 31 was a tomb with a pair of feet, the toes straight and connected at the junctions, Tomb K 27
 and arching to the instep, extended N. 10° E. 100° and 110° to the west and southeast of the toes and the
 third of green, light, rectangular and light, set, which had been broken, were distributed. A
 number of very small, white, shell, and light, set, which had been broken, were distributed.

The feet of the feet, a pair of feet, the toes straight and connected at the junctions, Tomb K 27
 and arching to the instep, extended N. 10° E. 100° and 110° to the west and southeast of the toes and the
 third of green, light, rectangular and light, set, which had been broken, were distributed. A
 number of very small, white, shell, and light, set, which had been broken, were distributed.

Tomb K 39

Tomb K 40

Tomb K 41

In K 39 nothing was found except a few pieces of bone.

In K 40 there was the skeleton of an infant. The grave was constructed later than K 40-43 when the wall of K 40 had already been built and the floor was about 1.25 m. higher.

In K 41 a small child was found in a narrow grave surrounded by small stones. The floor of the grave was composed of small stones. The wall of K 41 which are illustrated in the upper passage, and the wall of the grave were constructed several times in this part of the cemetery. In K 42 the skeleton of an infant was found. The infant was of large size. The lower part of the body was partially covered by a large shell.

In front of K 42 and K 43 were two small graves of brick with triangular niches for offerings built against them. There are several pits in the wall and in the floor of the description of K 37 on p. 190.

Tomb K 44.

Tomb K 44

A tomb of unusual construction, which is best illustrated by the photographs on Pl. 83 and 84. The plan was that of a simple oblong structure 1.50 m. by 1.25 m. wide, consisting partly of mud-brick and partly of stone. The middle part was built on the top of a wall of stone, and it extended to the neighbouring tomb K 45.



Fig. 83. Tomb K 44.

The wall of the tomb was built with mud-brick, which fitted closely against the stone wall. The wall was built with a wall of stone, and it extended to the neighbouring tomb K 45. The wall of the tomb was built with mud-brick, which fitted closely against the stone wall. The wall was built with a wall of stone, and it extended to the neighbouring tomb K 45.

One of the two brick pillars belonging to K 41 is built on the top of this wall which encloses the platform of K 41.

In the east end of the tomb a small niche was built up in the inside wall (Pl. 84).

In front of this was a low quadrilateral structure of brick against the corner of which was a pit containing the bones of an infant, and outside the north-east corner of the tomb was a flat pit containing an infant's bones.



Fig. 84. Tomb K 44.

These two burials are marked A and B on the annexed plan. The tomb contained seven skeletons in two rows. Approaching from the west, and four in the eastern half of the tomb. The skeletons in the first row were a case of Tailed Yahudieh type (skeleton 18804, Pl. 84) and 18804 n. With the central burial in the same row were also two alabaster idols, 18805 Pl. 84, and a case of the same form as 18807, while just to the west of these, again, at the end of the tomb were another alabaster idol, 18806, a case of the same form as 18807, a copper mirror, 18808, and a pit 18809, of the same form as 18807. Between the two rows were a pit of Type 18810 and a pit of Type 18811, viz. 18812 Pl. 84.

On the north side of the tomb, outside the wall, were the bones 18809, and on the south side of the tomb, outside the wall, were several tubular and ring-heads of blue glass, with some ring-head and tubular beads of carnelian. Under the shoulder of one of the skeletons in the eastern row were the remains of a pair of copper tweezers.

In the middle of the inner wall near the door were ring-heads of blue glass and of shell, 18803 n, strip-heads of shell, and the Tailed Yahudieh case 18804, Pl. 84.

The photograph, on 31, is taken from the west side, with the caption, "That part of the earth (look E. 40) in position." The right-hand picture (number 32), shows the earth as it indicates the position of the three bodies in the western sky. The left-hand picture (33), shows distances with the earth completely cleared from them, and reveals the early sunset. No other stars are visible, including the sun, as the sun is not yet visible. The caption, "The earth is in position, and the sun is in position." is also present.

From remains of plants and seeds adhering to the sides of the vessels that the testicles had originally been buried in, a *Castanea* was found.

In the rubric between items K and L, it is recorded that the amount from the former by interest and profits, was then added to the value of L, and both amounts to be added together. The number of the period for which it was set to be a capital is not given.

[illegible]

Tomb K 45.

Traces of the superstructure remained. The stepped dome led down to a depth of 4 m in Camp K 42 and a door at the end of it, 10 m from the entrance, to the principal chamber (Fig. 1) in which the real (and rather small) *Imperator* was to be seated.

A narrow pleurosternite (less than 1/2 the length) was present above that of *C. l.* I constructed three houses, being at least 1/2 inch side by side with their heads at the west end, the ground being composed of wood ground (they looked that way) and covered with a wooden collar. At the foot of the collar, midway over the way, I put 35 ggs and a shallow food cup on an inch or so of red fir was the entrance with hummocks. At the west end corner was the first placed cup, rather

For the choice of λ given by (2.10) and $\lambda = 2\beta + 1$ in (2.11) a globalizer is:

It was about 4 m. across, about 4 m. and 5 m. high. It contained three sections lying at right angles to each other. At the west end, the pieces of plaster and gold leaf were in the best condition, such as those in Figure 1, 2, 3, 4, 5, 6, 7, 8. In the northwest corner of the earth were the first piece (Fig. 9) and another of the same type, with a bowl of red-brown eggs about 1 m. high and a ring in diameter. Under these was a shallow bowl of red-brown ware (Fig. 10) washed.

It was a chamber 2.0 m. across 6 and 4.0 m. high. The roof had partly collapsed, crushing several people who had been forced on it at full height with their heads in the windward. About the roof were open to the light and scraps of badly moulded plaster marks still showing traces of paint in yellow, green, purple, red, etc. The faces of the masonry seem to have been covered with paintings of various animals, birds, fish, and birds. There had been lacunae, especially moulded in the stones, and then added. The bottom had been prepared on a surface which was covered and to be seen. Mixed up with the fragments of lacunae on the north side of the chamber were the bones carved very small in the shape of a man, a dog, a lion, and the golden carved beads, etc. In the northwest corner were two dishes of silver and the rest of the

In the subject of the character were a much decorated badge of Shaker of the shape of
1027 of Pl. 10 and the small bottom vase of black and white marble, 1028 of Pl. 10



• 31 • 41

CHAPTER XVI

CATALOGUE OF OBJECTS IN THE UNIVERSITY MUSEUM, PHILADELPHIA,
FOUND IN THE NEW EMPIRE CEMETERY, AT RUTHEN.

0.54 (0.0000) 0.71 (0.0000) 0.82 (0.0000) 0.91 (0.0000)

$$\begin{aligned} & \text{At } (x_0, y_0) = (0, 0), \text{ we have } \frac{dy}{dx} = 0, \text{ and } y = 0 \text{ is a solution.} \\ & \text{At } (x_0, y_0) = (1, 1), \text{ we have } \frac{dy}{dx} = 1, \text{ and } y = x \text{ is a solution.} \\ & \text{At } (x_0, y_0) = (1, 0), \text{ we have } \frac{dy}{dx} = 0, \text{ and } y = 0 \text{ is a solution.} \end{aligned}$$
[illegible]

- [illegible]

CATALOGUE OF OBJECTS FROM NEW EMPIRE CEMETERIES 23

[illegible][illegible]
$$K = 11 \times 10^{-3} \text{ s}^{-1} = 11 \times 10^{-3} \times 60 \times 60 \times 24 \times 365 \text{ h}^{-1} = 281.1 \text{ h}^{-1}$$
$$1.55 \times 10^{-4} \text{ mol/l} = 1.55 \times 10^{-4} \times 10^3 \text{ mol/m}^3 = 0.155 \text{ mol/m}^3$$
[illegible]

50340. * Elm-noddy, *Elanus leucurus*, ...

[illegible]

【分析】(1) 求导, 令导数为 0, 解得 $x = 1$, 再求二阶导数, 得 $f''(1) = 2$, 故 $x = 1$ 是极小值点, 且 $f(1) = 1$, 故 $f(x)$ 在 $x = 1$ 处取得极小值 1.

conyA, II. The *conyA* gene is located on the *con* operon, and the *conyA* gene product is a component of the *con* operon. The *conyA* gene is located on the *con* operon, and the *conyA* gene product is a component of the *con* operon. The *conyA* gene is located on the *con* operon, and the *conyA* gene product is a component of the *con* operon. The *conyA* gene is located on the *con* operon, and the *conyA* gene product is a component of the *con* operon.

[illegible][illegible]
$$5.10^2 \leq 1 + 1.5 \times 10^{-2} \leq 1.015 \times 10^2 \leq 1.015 \times 10^2 \leq 1.015 \times 10^2$$

1. *How many people are there in your family?*
 2. *How many people are there in your class?*
 3. *How many people are there in your school?*
 4. *How many people are there in your country?*
 5. *How many people are there in your world?*
 6. *How many people are there in your universe?*
 7. *How many people are there in your galaxy?*
 8. *How many people are there in your universe?*
 9. *How many people are there in your galaxy?*
 10. *How many people are there in your universe?*

[illegible]

* 4.1 1980年1月1日以前

PHYS. OF CONDENS. MATTER, 1975, 15, 1

10103. *Chen, S. C. and S. C. Chen. 1989.* *Journal of Applied Ecology* 26: 101-110.

1954 年 1 月 1 日, 中国科学院成立, 中国科学院图书馆也随之成立。中国科学院图书馆的前身是 1956 年 1 月 1 日成立的中国科学院图书馆, 其前身是 1956 年 1 月 1 日成立的中国科学院图书馆。

1996a: The role of the environment in the development of the human brain. *Developmental Psychology* 32: 1-11.

1996b: The role of the environment in the development of the human brain. *Developmental Psychology* 32: 1-11.

[illegible]

10170-7.7 Two new species of the genus *Holc*

$$- \frac{1}{2} \left(\frac{\partial^2 V}{\partial x^2} + \frac{\partial^2 V}{\partial y^2} + \frac{\partial^2 V}{\partial z^2} \right) = - \frac{1}{2} \Delta V$$
[illegible]

1. *Chrysomelidae*

[illegible][illegible][illegible][illegible]

1992年12月15日
 1992年12月15日

$$P_{\text{eff}} = \frac{P_{\text{max}}}{1 + \left(\frac{P_{\text{max}}}{P_{\text{th}}} \right)^{\alpha}} \quad (1)$$

1943: 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 26

[illegible]

Example 1. Let $\mathcal{A} = \{a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z\}$. If y is a letter in \mathcal{A} , then y is the solution word.

$$A_1^{\pm} = \frac{1}{2} \left(A_1 \pm \frac{1}{\sqrt{3}} A_2 \right), \quad A_2^{\pm} = \frac{1}{2} \left(A_1 \mp \frac{1}{\sqrt{3}} A_2 \right), \quad A_3^{\pm} = \frac{1}{2} \left(A_1 \pm \frac{1}{\sqrt{3}} A_2 \right), \quad A_4^{\pm} = \frac{1}{2} \left(A_1 \mp \frac{1}{\sqrt{3}} A_2 \right).$$

CHAPTER XVII

CATALOGUE OF OBJECTS IN THE UNIVERSITY MUSEUM, PHILADELPHIA,
FOUND IN CEMETERY K, AND IN THE TEMPLE OF RUHEN

On the other hand, the β -phase is formed in the α -phase by the following reaction according to the order of the β -phase formation: $\beta_1 \rightarrow \beta_2 \rightarrow \beta_3 \rightarrow \beta_4 \rightarrow \beta_5 \rightarrow \beta_6 \rightarrow \beta_7 \rightarrow \beta_8 \rightarrow \beta_9 \rightarrow \beta_{10} \rightarrow \beta_{11} \rightarrow \beta_{12} \rightarrow \beta_{13} \rightarrow \beta_{14} \rightarrow \beta_{15} \rightarrow \beta_{16} \rightarrow \beta_{17} \rightarrow \beta_{18} \rightarrow \beta_{19} \rightarrow \beta_{20} \rightarrow \beta_{21} \rightarrow \beta_{22} \rightarrow \beta_{23} \rightarrow \beta_{24} \rightarrow \beta_{25} \rightarrow \beta_{26} \rightarrow \beta_{27} \rightarrow \beta_{28} \rightarrow \beta_{29} \rightarrow \beta_{30} \rightarrow \beta_{31} \rightarrow \beta_{32} \rightarrow \beta_{33} \rightarrow \beta_{34} \rightarrow \beta_{35} \rightarrow \beta_{36} \rightarrow \beta_{37} \rightarrow \beta_{38} \rightarrow \beta_{39} \rightarrow \beta_{40} \rightarrow \beta_{41} \rightarrow \beta_{42} \rightarrow \beta_{43} \rightarrow \beta_{44} \rightarrow \beta_{45} \rightarrow \beta_{46} \rightarrow \beta_{47} \rightarrow \beta_{48} \rightarrow \beta_{49} \rightarrow \beta_{50} \rightarrow \beta_{51} \rightarrow \beta_{52} \rightarrow \beta_{53} \rightarrow \beta_{54} \rightarrow \beta_{55} \rightarrow \beta_{56} \rightarrow \beta_{57} \rightarrow \beta_{58} \rightarrow \beta_{59} \rightarrow \beta_{60} \rightarrow \beta_{61} \rightarrow \beta_{62} \rightarrow \beta_{63} \rightarrow \beta_{64} \rightarrow \beta_{65} \rightarrow \beta_{66} \rightarrow \beta_{67} \rightarrow \beta_{68} \rightarrow \beta_{69} \rightarrow \beta_{70} \rightarrow \beta_{71} \rightarrow \beta_{72} \rightarrow \beta_{73} \rightarrow \beta_{74} \rightarrow \beta_{75} \rightarrow \beta_{76} \rightarrow \beta_{77} \rightarrow \beta_{78} \rightarrow \beta_{79} \rightarrow \beta_{80} \rightarrow \beta_{81} \rightarrow \beta_{82} \rightarrow \beta_{83} \rightarrow \beta_{84} \rightarrow \beta_{85} \rightarrow \beta_{86} \rightarrow \beta_{87} \rightarrow \beta_{88} \rightarrow \beta_{89} \rightarrow \beta_{90} \rightarrow \beta_{91} \rightarrow \beta_{92} \rightarrow \beta_{93} \rightarrow \beta_{94} \rightarrow \beta_{95} \rightarrow \beta_{96} \rightarrow \beta_{97} \rightarrow \beta_{98} \rightarrow \beta_{99} \rightarrow \beta_{100}$

[illegible]

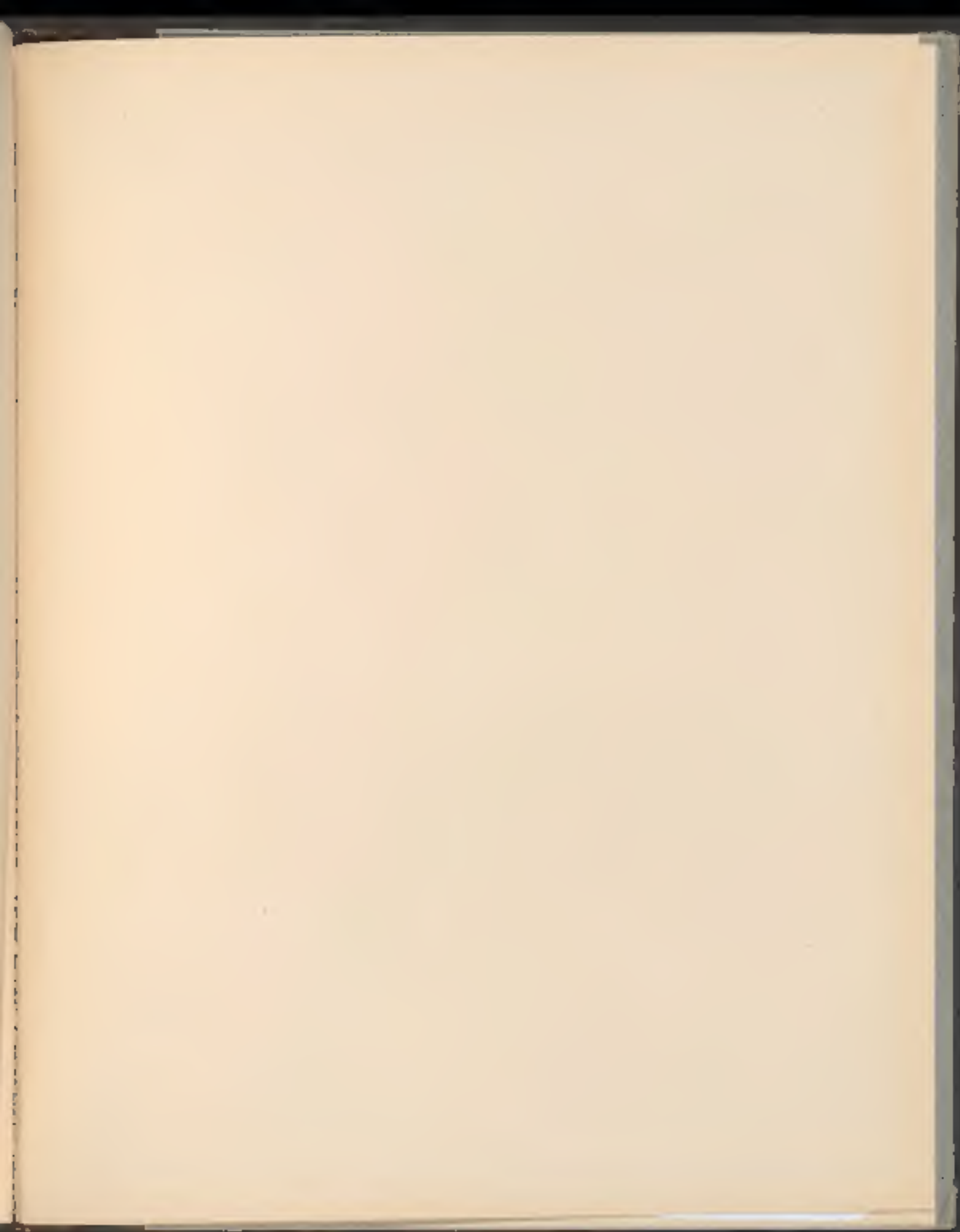
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